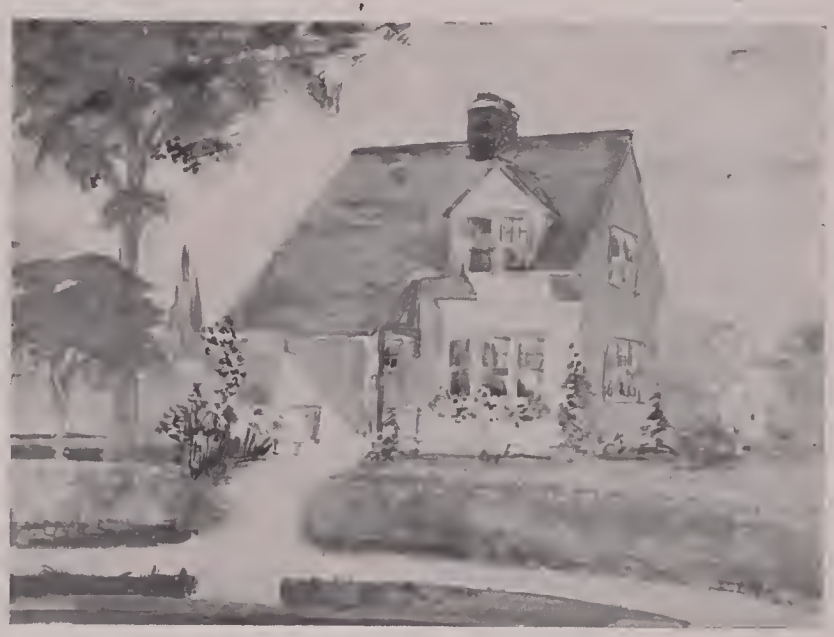
HOUSING CONDITIONS

IN THE CITY OF SAINT PAUL



REPORT PRESENTED TO THE HOUSING COMMISSION OF THE ST. PAUL ASSOCIATION

BY

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DIRECTOR OF SOCIAL SERVICE - - AMHERST H. WILDER CHARITY

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Preface

THIS investigation was undertaken by the Amherst H. Wilder Charity Foundation at the suggestion of the St. Paul Association. The work was done under the personal direction of Dr. Carol Aronovici, whose experience and knowledge are attested to by more than two score communities throughout the country in which he has assisted in the study and improvement of conditions.

The Housing Commission of the St. Paul Association has kept in constant touch with the work and its members have personally inspected many of the conditions referred to in this report. The statements made, we believe to be in conformity with the facts, and we are fully in accord with the suggestions for improvement. The Commission and its members will do all that is in their power to provide the necessary machinery for the removal of existing evils and remain at work until this machinery has proved its efficiency or has been supplanted by other and more efficient means of attaining the desired ends.

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Introduction

Citizens of Saint Paul who expected the results of the Housing Survey to be startling in its revelation of conditions will be disappointed no less than will the complacent business man and the professional booster, who believe that all is well relative to the safety, comfort and sanitation of the working people of this city.

It must be stated at the outset that the housing evils in this City are no worse and no better than are the evils found in most of the rapidly growing cities of this country. The measure of the quality of our local patriotism is not to be measured by the extent of the evils which we have tolerated through ignorance, but by the rapidity with which we improve conditions once they are known and the means of removing them made clear.

This Survey of Housing conditions in the City of St. Paul was undertaken by the Wilder Charity in the belief that new and more effective housing legislation is necessary, and that through the instrumentality of the Housing Commission of the St. Paul Association and with the co-operation of City officials, conscious of the seriousness of the existing evils, such legislation and machinery for its enforcement would be secured without unnecessary delay.

The information gathered in the course of the Survey, while not covering the whole of the city, relates to the homes of over 21,000 people whose living conditions are of sufficient moment to demand attention. That limitation of time and the exorbitant cost of a complete survey of the community have made it necessary to confine our observations to specific areas will be evident to those familiar with undertakings of this kind. The best conditions will not receive much attention in this report, and we fear that some of the worse evils have escaped our observation. The evidence that we have been able to gather, however, is of sufficient extent and seriousness to command public attention.

It is to be hoped that the citizens of St. Paul will not take the unpleasant facts revealed in this report as intended to disparage either the potential or actual merits of St. Paul as an industrial and residential center, but that they will see it as a diagnosis of such pathological, social, and sanitary conditions as the average citizen is likely to overlook to the detriment of his community, with disastrous effects upon the people affected.

In so far as existing legislation and available machinery for its enforcement permit, a considerable number of specific evils have been removed through the instrumentality of the local Department of Health. The main task, however, remains to be accomplished through the concerted efforts of the Municipal Council and the various City Departments.

The undersigned wishes to express to the Housing Commission of the St. Paul Association his gratitude for their earnest co-operation in the carrying on of the survey, and especially for the work done in the shaping up of the proposed Housing Ordinance.

The writer also wishes to express his indebtedness to the staff of field workers who gave their services at a time when such work is most difficult. They proved themselves vitally interested in their task and rendered most efficient service.

CAROL ARONOVICI.

Rear lot homes

Housing Survey

General Considerations

PURPOSE OF INVESTIGATION.

This survey was carried on primarily for the purpose of revealing to the public sanitary conditions that may be a menace to the health of the residents of the poorer sections of the city with a view to stimulating more efficient service on the part of the municipality in the control of existing evils. This primary object is, however, neither fundamental nor far reaching. The prevention in the future of the development of similar conditions by proper legislative control, and the pointing out of the error of the past that proved neither economical to the individual builder nor promotive of the best interest of the City, are of far greater importance than the palliative remedial work, that conditions revealed by our investigation may stimulate.

Should St. Paul become aware of the need for a city-wide housing policy of a constructive character, and hasten to translate this awareness into constructive housing by means of amenable and necessary legislative measures, that will promote rather than restrict building of high standard, our purpose shall have been accomplished, and the future of St. Paul as a residence community assured.

FIELD COVERED.

It was realized at the beginning that a complete survey of the housing conditions of the entire population was neither necessary nor practicable because of the enormous expense, the long delay, the difficulty of obtaining sufficient workers capable of doing the work, and the large proportion of houses that represent a high standard of housing and sanitation. It is also clear that there are in every community certain typical evils and defects which come to light in any housing inquiry if the field is selected with sufficient care to be representative. In the last analysis social diagnosis concerns itself with the ascertaining and measurement of abnormal, undesirable conditions, rather than with the evolution of the desirable and normal.

With this point of view in mind certain sections of the City were selected. They are shown in Map No. I and cover an area of about 30 blocks with a population of 21,000.

We are aware that there are other districts in this City which should have been made the subject of investigation if our aim was to be purely a checking up of the work of the Health and other departments concerned with the health and safety of our people. Our task, however, was merely the application of an efficiency test to given districts most in need of efficient service, and not a complete inspection of conditions throughout the entire community which is the duty of the local governmental agencies.

The area covered by this investigation was divided into eighteen districts. After some preliminary investigation, districts V, VI, VII, XIII, were eliminated because the conditions found did not warrant a thorough house to house investigation, although some conception of the conditions were formed from a superficial investigation in the districts that we did not cover by a house to house canvas. The eighteen districts may be described as follows:

General Consideration

District	Ward	Descriptive Title	Boundaries
I	6	West Side Lower Levee	East of Wabasha and North of Fairfield.
II	6	West Side Lower Flats	East of Wabasha between Fairfield and C. G. W. Ry.
III	6	West Side Upper Levee	North of Fairfield from Wabasha southwesterly to city limits.
IV	6	West Side Upper Flats	West of Wabasha between Fairfield and Prospect Terrace.
V	4	Upper Plateau	Jackson, Summit, Fourth and Eagle (except District VI).
VI	4	Principal Retail District	Jackson, Eighth, St. Peter and Mississippi River.
VII	3	Principal Wholesale District	Jackson, Eighth, Pine and Union Depot Tracks.
VIII	3	Old Lower Town and R. R. Yards	Jackson, Grove and R. R. Tracks (except District VII).
IX	1	Williams St. and Vicinity	Grove, Mississippi, G. N. Ry. and Soo Tracks.
X	1	Collins St. and Vicinity	Surrounded by R. R. Tracks (G. N., Omaha and N. P.).
XI	2	Phalen Creek (Swede Hollow)	Between N. P. (Duluth Line) and Bluff.
XII	9	Upper Broadway and Vicinity	Mississippi, Grove, Jackson and G. N. Ry. Tracks.
XIII	9	State Capitol and Vicinity	Rice, Summit, Jackson and G. N. Ry. Tracks.
XIV	8	West of Rice and North of G. N. Ry.	Farrington, Rice, Hatch and Atwater Sts.
XV	9	East of Rice and North of G. N. Ry.	Rice, Lyten, Oakland Cemetery, Cortland and Acker.
XVI	8	Farrington Ave.—Como to Carroll	——Both sides of Farrington.
XVII	5	West Seventh St. to River	——Eagle St. to Omaha Shops.
XVIII	5	Upper Levee (under High Bridge)	——Between Bluff and River.

TIME.

The time consumed in carrying on the field work was a little less than 3 months, beginning about April 15th and ending about the 1st of July. This gave the field workers an opportunity to see conditions during the most trying periods of the year, and during the summer when cleaning up and emergency repairs can be made without encountering climatic difficulties. That throughout the entire period of field investigation many nuisances were found that should have been removed without delay will be shown in the later parts of this report.

The question as to whether these trying times of international complication and war emergencies were opportune for the consideration of local, and from the international point of view, minor issues, has sometimes been raised in connection with this survey. The only pertinent answer to this question is that as the waste of human life in war increases and comes closer to our own national life, the higher rises the value of our human resources. Good housing is fundamental to good health, decent surroundings are essential to patriotism, warfare depends upon both. Can any one question the efficiency of housing reform as a war measure, especially as the length of the struggle seems to show no signs of coming to a speedy end? Healthy, efficient, patriotic men will be needed—they cannot be raised in the slums.

LEGISLATION AND LAW ENFORCEMENT.

A study of the amount and character of legislation available for the control of housing conditions and an examination of the machinery for the enforcement of whatever legislation does exist proved to us beyond a question that both need reorganization and radical change. St. Paul conditions should therefore not be laid at the door of the local city officials entrusted with the enforcement of legislation, but to the neglect on the part of the legislative bodies, State and City, and in the last analysis, upon the citizens who so far have failed to recognize the needs of this community for better and more constructive methods of dealing with the housing of the people.

CITY PLANNING

The most drastic housing legislation can not be entirely effective without comprehensive city planning of a constructive character. The facilities for obtaining the maximum amount of light and air, the economical use of land without hindrance to requirements of safety, sanitation, convenience, or permanency of investment, are problems of city planning that housing legislation in its ordinarily accepted interpretation cannot cope with.

St. Paul has already established a zoning system which protects the owners of dwellings against deterioration of values due to failure to segregate industrial and commercial activities. Some effort is also being made to protect strictly residential areas against encroachment through construction of tenements, apartments or apartment hotel buildings which are out of keeping with the character of the neighborhoods which they are attempting to invade.

That a considerable task along the lines of developing a consistent policy of city planning is still to be added to the present scheme of community development that both public and private agencies are engaged upon, is evident to any one examining the map of the City of St. Paul.

This report does not pretend to deal with the problems of city planning except as they relate directly to the area studied and affect the types of building that come under our observation. A careful survey of city planning problems should be a direct corollary of this investigation.

The sections generally known as "Swede Hollow" and the "Flats," which constitute the lowest types of residential districts not only in St. Paul but of many cities that it has been the writer's privilege to examine, offer remarkable opportunities for replanning. The complete wiping out of the former district would afford a most unusual opportunity for the development of a park area which would serve as a breathing space for a district growing in congestion and in need of open space.

Phalen Creek and the banks of this stream are ideal for park purposes, while in their present state they constitute a menace to the health of the residents and to the community at large.

The "Flats" if properly treated would afford a splendid opportunity for the development of an industrial zone accessible to rail and river transportation instead of being what they are today, a slum of the worst character.

The entire city needs a constructive plan, but the elimination of the slums and the redistricting of the city to meet the housing and industrial needs of the wage earners and poorer elements of the population, should take precedence over the construction of costly public buildings, the development of improving thoroughfares, the building of boulevards designed for the automobile tourist, the opening up of park areas in districts undeveloped and inaccessible sections of the City. These things, while desirable, should not take precedence over the immediate needs for the improvement of the living conditions of the people.

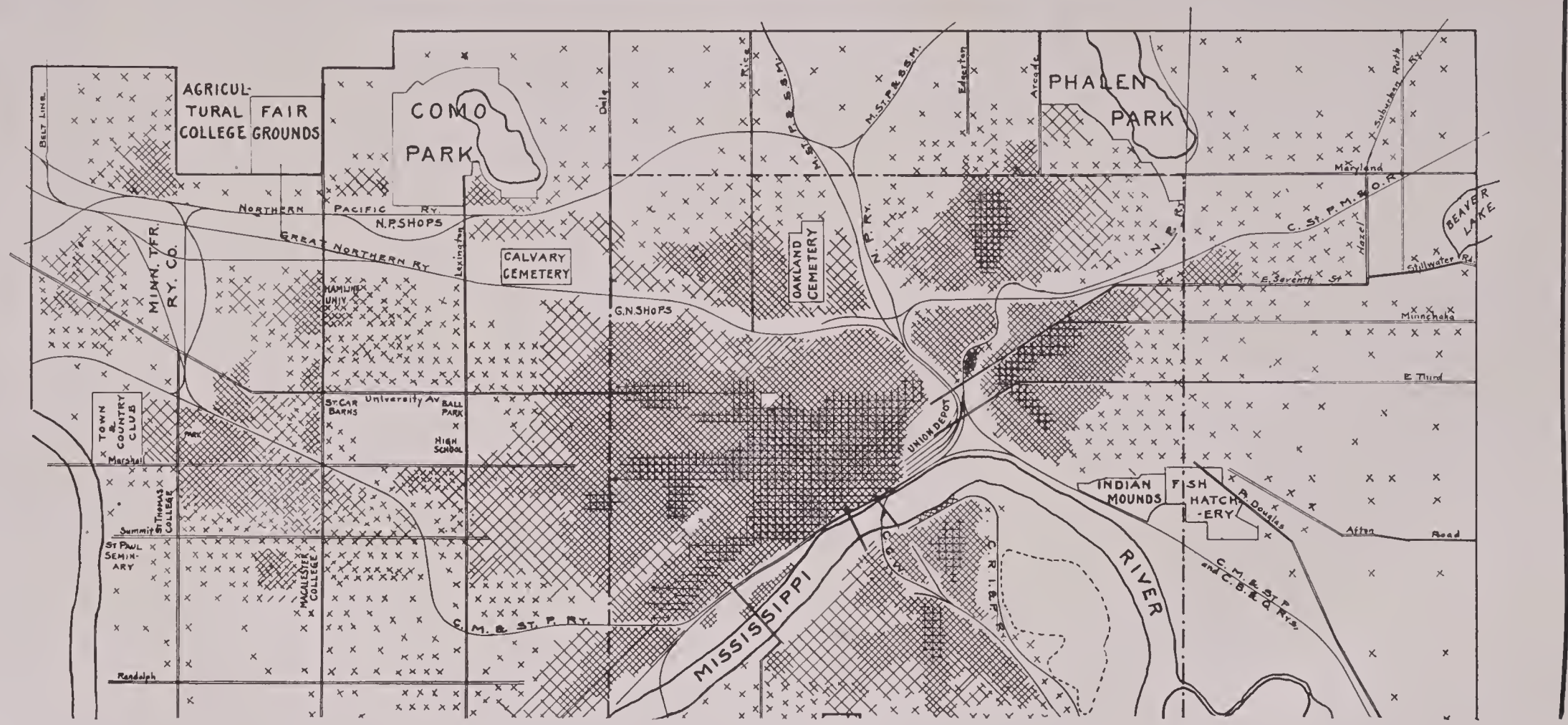
POPULATION.

In the study of housing conditions much is frequently attributed to the methods of living in vogue among the occupants of the dwellings examined. The "foreigner" is generally made the excuse for existence of housing evils, and the trite stories about the potatoes in the bath tub or the goat in the parlor are related with much satisfaction and with no little success in postponing legislation and avoiding or delaying law enforcement. The same kind of reasoning was used in New York City at the time when slum conditions were created by a large increase in German and Irish population thirty or forty years ago, as is used throughout the whole country against the Italian, the Pole, the Armenian, or any other

DENSITY OF POPULATION CHART

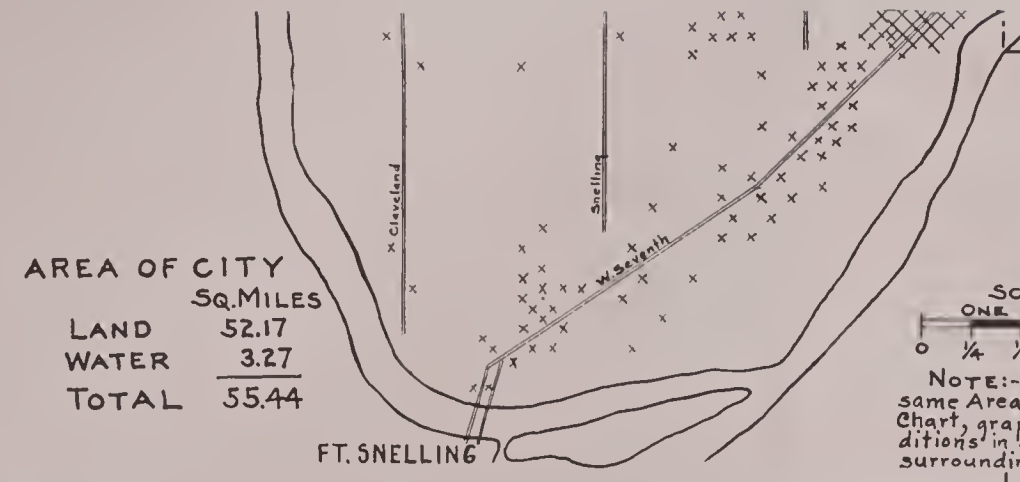
ST. PAUL, MINN.

COMPILED FOR THE HOUSING SURVEY, JULY, 1917.



AREA OF CITY

	Sq. Miles
LAND	52.17
WATER	3.27
TOTAL	55.44



Indicates Area Shown on Key Map of Districts below.
---Each Cross or Star Represents 50 People.
Population of Entire City Estimated as 290,000 based on Census of 1910, and proportionote Increase as shown by City Directory for 1916.
Distributibn pro-rated on basis of Totol Names on Register of Electors by Precincts, May Election, 1916.
Residents in Sparsely Settled Districts located from actual situation of Houses shown in Atlas issued in 1916.
Compilations made by R. R. Knowlton, June & July, 1917.

SCALE
ONE MILE
0 ¼ ½ ¾ 1

NOTE:- A comparison of this Key Map with the same Area, as indicated on Density of Population Chart, graphically shows that poor housing conditions in St. Paul are created more by physical surroundings than by congestion of population.

District	Ward	Descriptive Title	Boundaries	Principal Characteristics
I	6	West Side Lower Levee	East of Wabasha & North of Fairfield	Squatters & Renters.
II	6	" " " Flats	East of Wabasha between Fairfield & C.G.W.Ry.	Congested & Poor.
III	6	" " Upper Levee	North of Fairfield from Wabasha Southwesterly to City Limits	Laborers-Scattered.
IV	6	" " " Flats	West of Wabasha between Fairfield & Prospect Terrace	Fairly good, but old.
V	4	Upper Plateau.	Jackson, Summit, Fourth & Eagle (Except District VI.)	Apartment Houses
VI	4	Principal Retail District	Jackson, Eighth, St. Peter & Mississippi River	Cheap Hotels
VII	3	" Wholesale "	Jackson, Eighth, Pine & Union Depot Tracks.	Lodging Houses
VIII	3	Old Lower Town & R.R. Yards	Jackson, Grove & R.R. tracks (Except District VII.)	Congested portion to be demolished by R.R.
IX	1	Williams St. & Vicinity	Grove, Mississippi, G.N.Ry and Soo Tracks	Badly depreciated
X	1	Collins St. & Vicinity	Surrounded by R.R. Tracks (G.N., Omaha, & N.P.)	" "
XI	2	Phalen Creek (Swede Hollow)	Between N.P. (Duluth Line) and Bluff	Shacks-Land Rent only.
XII	9	Upper Broadway & Vicinity	Mississippi, Grove, Jackson and G.N.Ry. Tracks	Below hill - Bad. On hill - Fairly good.
XIII	9	State Capitol & "	Rice, Summit, Jackson and G.N.Ry. Tracks.	Good, but old.
XIV	8	West of Rice & North of G.N.Ry.	Farrington, Rice, Hatch and Atwater Sts.	Small Houses Owners predominate.
XV	9	East of " " " " "	Rice Lyton, Oakland Cemetery Cortland & Acker.	District depreciated by Cemetery & R.R.
XVI	8	Farrington Ave - Como to Carroll.	— Both Sides of Farrington	Poor & Good side by Side.
XVII	5	West Seventh St. to River.	— Eagle St to Omaha Shops	Brewery & R.R. Employees Some depreciation.
XVIII	5	Upper Levee (under High Bridge)	— Between Bluff & River	Shacks close together.

KEY TO SURVEY

BEING A SUBDIVISION OF THOSE PARTS OF THE CITY SURVEYED BY THE

HOUSING COMMISSION

INTO

DISTRICTS

SEPARATED BY PHYSICAL OBSTRUCTIONS, OR HAVING DISTINCT CHARACTERISTICS.

LEGEND

- Fairly good, but old.
- Once good, but depreciated.
- Generally bad.
- Houses poor & Depreciated.
- Shacks & Squalor.

IN GENERAL - The darker the map, the worse the housing conditions are.

nationality that prevails in a given community, for which no adequate provisions have been made by those who are most in need of foreign labor or by the booster who points with pride to inflated census figures of population, and shuts his eyes to the growing slum and its ally, a high criminality and death rate.

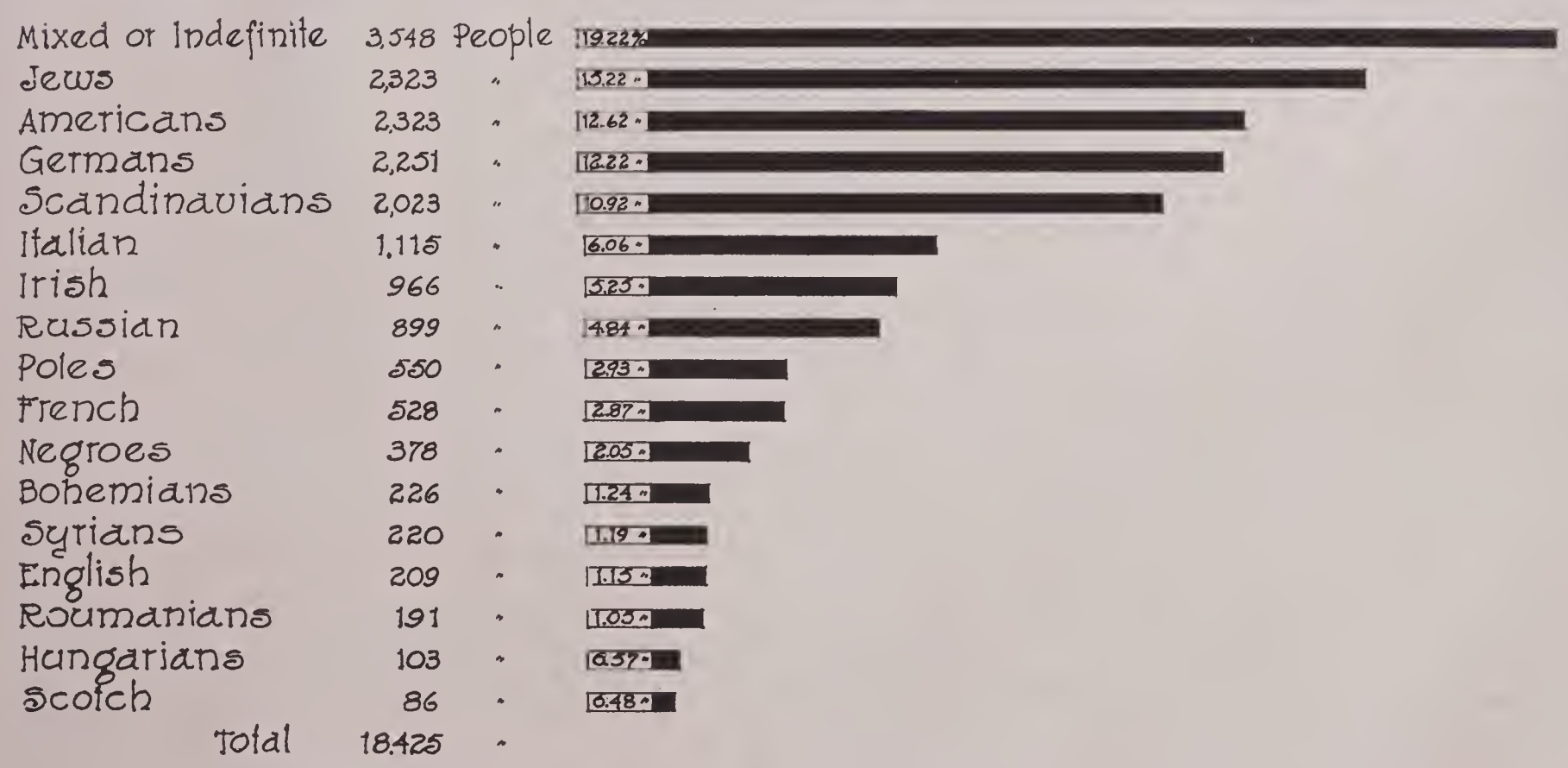
The following figures relate to the nationality of the population residing in the area studied in the course of this investigation regarding which accurate data was obtained:

Table I. Distribution of Population Studied According to Nationality of Parents or Heads of Families, Exclusive of Lodgers.

Nationality	Number of People	Per Cent Total
Jews	2,809	15.22
Americans	2,323	12.62
Germans	2,251	12.22
Scandinavians	2,023	10.98
Italian	1,115	6.06
Irish	966	5.25
Russian	899	4.84
Poles	550	2.99
French	528	2.87
Negroes	378	2.05
Bohemians	226	1.24
Syrians	220	1.19
English	209	1.15
Roumanians	191	1.05
Hungarians	103	0.57
Scotch	86	0.48
Mixed or indefinite	3,548	19.22
Total	18,425	100.00

1. Nationality of the family is based upon the country of birth of both parents, except in the case of the Jews.

If we eliminate the 3,548 of mixed and unknown nationalities we find that out of a total of 14,877 people, 5,397, or 36.2 per cent. were either American or of nationalities ordinarily considered as of desirable character such as Germans, French, English and Scotch. That the ordinary conditions of neglect, misuse or abuse of property found in the course of our investigation may be laid upon the methods of living of the tenants is the contention that is ordinarily accepted by the general public, and in some instances is justifiable. The fact, however, that such defects as poor lighting, fire hazard, lack of sewer facilities, land sweating and other similar conditions which are purely structural, have been permitted by law, and the buildings were, in 92 per cent of the cases where information was available, older than 10 years, would seem to indicate that the failure of the State and local government to provide adequate control of buildings and necessary provisions for its enforcement, is clearly the responsibility of the people who determine at the polls the standards of safety and sanitation under which they desire to have the people of the City, native and foreign, live.



Distribution of Population According to Nationality of Heads of Families.

OWNERSHIP AND SIZE OF FAMILIES.

Not infrequently the proportion of families owning their own homes determines the extent of neglect and lack of sanitary conditions in a community or a given district. The following Table shows the frequency of ownership according to nationality of the head of the family:

Table II. Showing number and per cent of rented and owned dwellings by nationality.

	Renters		Owners	
Nationality	No.	Percent	No.	Percent
American	410	76.27	129	23.73
German	284	60.78	182	39.22
Scandinavian	314	70.36	132	29.64
Jewish	202	56.56	155	43.44
Irish	151	73.67	54	26.33
Italian	135	58.18	97	41.82
Negro	96	82.76	20	17.24
French	82	80.32	20	19.68
Russian	73	71.56	29	28.44
Polish	63	68.49	29	31.51
English	41	87.24	6	12.76
Syrian	29	74.36	10	25.64
Bohemian	21	42.00	29	58.00
Roumanian	29	72.50	11	27.50
Hungarian	16	69.58	7	30.42
Scotch	18	81.82	4	18.18
Mixed	542	72.49	206	27.51
TOTAL	2,506	68.90	1,120	31.10

These figures show that in order of their proportion of ownership the nationalities represented, the Jews, the Italians, the Germans and the Scandinavians have the largest number of home owning families. Among the nationalities of which more than 100 families were studied, the French and the Negroes only showed a smaller proportion of home owning families than the Americans. That many of the Americans capable of owning homes have been driven out of these districts with the encroachment of the foreigners is a well determined fact.

The size of the family is another element that frequently determines the congestion and the attending evils of congestion. In order to ascertain to what extent the size of the family may reasonably be attributed as a cause of the bad sanitary conditions found, we have analyzed the data gathered with the following results:

Table III. Showing number and per cent of rented and owned dwellings by size of families.

	Renters		Owners		Total	
Size of Families	No.	Per-cent	No.	Per-cent	No.	Per-cent
1-2	505	71.39	203	28.61	708	100
3-4	717	75.44	232	24.56	949	100
5-6	358	62.65	214	37.35	572	100
7-8	134	53.73	115	46.27	249	100
9-10	40	56.98	53	43.02	93	100
Over 10	10	83.33	2	16.67	12	100
TOTAL	1,764	68.28	819	31.72	2,583	

The above figures show that out of a total of 2,583 families only 354, or 13.71 per cent. were of more than six persons or four children and the parents. It is also clear that the families of the renters were larger than those of owners since only 184 out of a total of 1,764 or 10.43 per cent. were of more than six persons while there were 170 out of a total of 819 families or 20.76 per cent. home owning families with more than six persons per family.

SIZE OF HOUSES.

The number of rooms is the only index of the size of apartments and is in a sense a measure of the tendency towards congestion. In order to ascertain the distribution of the various sizes we have distributed the various apartments according to number of rooms and have separated the apartments in multiple dwellings from those in single dwellings.

Table IV. gives the distribution of apartments according to number of rooms in single and multiple dwellings:

Table IV. Showing Distribution of Single and Multiple Dwellings According to Number of Rooms.

No. Rooms	Multiple Dwellings Number	Multiple Dwellings Percent	Single Dwellings Number	Single Dwellings Percent
1	59	2.49	4	.21
2	153	6.48	38	2.01
3	409	17.31	156	8.26
4	934	39.55	362	19.23
5	553	23.42	424	22.45
6	187	7.92	399	21.19
7	42	1.78	235	12.46
8	17	.72	151	8.01
9	3	.13	54	2.86
10	2	.08	24	1.27
11			21	1.13
12	2	.08	6	.31
13			6	.31
14			1	.05
15				
16	1	.04		
17			2	.10
18				
19			1	.05
20			2	.10
Total	2,362	100.00	1,886	100.00

Table IVa. Showing Number of Persons in Single and Multiple Dwellings According to Number of Rooms.

No. Rooms	Multiple Dwellings No. Persons	Multiple Dwellings Percent	Single Dwellings No. Persons	Single Dwellings Percent	Total No. Persons	Total Percent
1	116	1.26	8	.08	124	.65
2	331	3.67	144	1.45	475	2.42
3	1,272	14.11	548	5.56	1,820	9.65
4	3,286	36.44	1,583	16.09	4,869	25.81
5	2,617	29.10	2,056	20.84	4,673	24.68
6	988	10.94	2,080	21.18	3,068	16.50
7	222	2.46	1,400	14.22	1,622	8.59
8	126	1.38	996	10.13	1,122	5.95
9	18	.20	399	4.06	417	2.21
10	11	.12	220	2.23	231	1.22
11			187	1.90	187	.99
12	20	.21	74	.75	94	.49
13			64	.65	64	.34
14			15	.15	15	.08
15						
16	10	.11			10	.05
17			34	.34	34	.18
18						
19			23	.23	23	.12
20			14	.14	14	.07
Total	9,017	100.00	9,845	100.00	18,862	100.00

The above figures (Table IV) show that out of the 4248 apartments studied 1886 or 44.44 per cent were single family houses and 2362 or 55.56 per cent were multiple dwellings. This prevalence of multiple dwellings in the poorer districts of the city deserves further attention because of the present tendency toward a smaller number of rooms per apartment in the multiple dwellings than in the single dwellings. This is evidenced by the fact that in proportion to the total number of each type of building there were almost four times as many one and two room apartments in multiple dwellings (8.95 per cent) as compared with the number of one and two room apartments in single dwellings (2.22 per cent). If we consider the three room apartments, there were more than twice as many such apartments in the multiple as compared with the single dwellings. On the whole, the figures show that there were far more apartments with less than four rooms in the multiple dwellings (26.24 per cent) as compared with the number of apartments with less than four rooms in single dwellings (11.04 per cent). If we go a step further and include apartments with four rooms we find the same disproportion between multiple dwellings (65.65 per cent) as compared with individual dwellings (30.27 per cent).

Accepting on trial the fact that rooms in multiple dwellings are smaller, with lower ceilings and usually with less access to light or facilities for ventilation, the disproportion of apartments with four or less rooms would seem to indicate that the multiple dwelling is not desirable as a means of increasing the extent of privacy or avoiding congestion in our houses.

This larger proportion of apartments with less than four or five rooms, while indicative of a certain tendency towards reducing the available rooms per family, unfortunately does not prove quite as advantageous when we consider the number of rooms per person in the apartments of less than five rooms in single as compared with multiple dwellings. The figures show that 5003 persons in multiple dwellings occupied apartments of less than five rooms. The total number of rooms in these apartments was 5328 or 106.4 rooms for every hundred persons, while in the case of single dwellings 2183 persons lived in 2004 rooms located in apartments of less than five rooms or only 93.6 rooms for every hundred persons.

On first consideration it would seem to indicate a greater tendency toward congestion in individual dwellings but the average size of the rooms, the larger kitchens which are often used as dining and sitting rooms, and the better lighting and ventilation that prevails in the single dwellings as compared with the multiple dwellings would more than offset the smaller proportion of rooms per hundred persons in single dwellings with less than five rooms. When we consider the total population in relation to the total number of rooms occupied we find that there is practically no difference between the single and multiple dwellings; the former having 107.5 rooms per 100 persons and the latter 107.4 rooms per 100 persons. It is clear that no great congestion exists and that altho some instances of serious crowding were found, they were limited mainly to abnormal dependent families with low standards of living.

ROOM OCCUPANCY BY DISTRICTS.

In the study of room occupancy it becomes clear that the difference in the amount of congestion must be considered both on the basis of total rooms and room occupied for sleeping purposes. It is also evident that there is a marked difference in the average number of persons per room in the various districts studied.

Table V. Distribution of Average Room Occupancy According to Type of Dwelling in Relation to Total Rooms and Sleeping Rooms per Apartment by Districts Studied.

	Average No. Persons Per Room			
	Single Dwellings		Multiple Dwellings	
District	Rooms	Bed Rooms	Rooms	Bed Rooms
I	1.10	2.07	1.08	2.18
II	1.03	1.95	1.07	2.09
III	1.12	2.35	.90	2.13
IV	.84	1.81	.99	2.01
VIII	.99	1.50	.91	1.69
IX	.83	1.42	1.01	1.84
X	.84	1.61	.85	1.95
XI	1.17	2.05	.81	1.98
XII	.91	1.84	1.04	2.15
XIV	.87	1.87	.85	1.88
XV	.85	1.74	.99	2.24
XVI	.77	1.68	.84	1.60
XVII	.99	1.98	.94	2.20
XVIII	1.37	2.55	1.55	2.74

The average occupancy of rooms and bedrooms in single and multiple dwellings as shown by the above table indicates clearly that while the difference in room occupancy is not materially different between the single and multiple dwellings, the bed rooms are more congested in the case of the multiple dwellings in all but three districts. The differences even in these districts are slight and the character of the neighborhoods either scattered or old residence areas that have become deteriorated such as the Phalen Creek district. These figures further emphasize the fact that while in point of numbers the rooms in multiple dwellings are more numerous, their use is so fixed as to make bedrooms available for sleeping purposes only and that these rooms are not in sufficient numbers to avoid congestion to the extent shown by the single dwellings. An examination of the map on page 12 which shows the character of each district clearly indicates that the degree of bedroom congestion is closely related to the character of the neighborhood.

Condition of Repair

EXTERIOR CONDITION.

It is not possible to state in any definite form the condition of repair of buildings in a manner that would convey a notion in keeping with any particular standard. We might have used a system of scoring but while the margin of error may have been reduced somewhat under this system the scale would not have been applied by the workers with any greater degree of accuracy than the ordinary classification of good, fair, and bad. To pretend statistical accuracy where there is no accepted uniform standard of measurement is not advisable. The relation bettween the number of families and the condition of repair is ordinarily well defined where the age of the buildings averages the same. Table VI shows this relationship.

Table VI. Showing State of Outside Repair of Bldgs. According to No. of Families Occupying.

No. Families	Good		Fair		Bad		No Information	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
1	671	33.85	688	34.6	327	16.65	298	14.9
2	282	36.94	254	33.47	105	13.96	117	15.63
3	37	33.64	41	37.27	20	18.18	12	10.91
4	53	50.46	25	23.81	16	15.24	11	10.49
5	8	38.08	4	19.05	5	23.81	4	19.06
6	3	13.63	10	45.45	6	27.28	3	13.64
7	3	33.34	2	22.22	2	22.22	2	22.22
8	1	50	1	50				
9	2	50					2	50
No Inf.	24	38.08	11	17.46	12	19.07	16	25.39
Total	1,084	35.22	1,036	33.64	493	16.03	465	15.11

There was a total of 1084 or 35.22 per cent. buildings in good condition of repair, 1036 or 33.64 per cent. in fair condition and 493 or 16.03 per cent. in bad condition of repair. Where the information was not stated with any degree of accuracy it was not tabulated.

The most striking fact about the above figures is the large proportion of buildings in good repair in structures occupied by four families. This is of course, due not to any special virtue of this type of building, but to the fact that a large share of the four family tenements is of recent construction, as can be seen from the records of the Building Department, and has therefore not had time to deteriorate to the same extent that other buildings have deteriorated without receiving the necessary repairs.

The elimination of the buildings regarding which information was not given will increase the proportion of buildings in good repair. It also becomes clear that the proportion of buildings in good repair occupied by one family constitute 39.84 per cent. of all buildings of this type instead of 33.85 per cent. and in the case of two family buildings the proportion of houses in good repair increases from 36.94 per cent. to 43.99 per cent. of the total houses of this type. Throughout our experience in the present investigation the one family dwellings were invariably represented by buildings of earlier construction in greater proportion than the multiple dwellings, unless the latter were originally intended as single dwellings and had been altered more recently for occupancy by more than one family.

Our observation throughout this study has proved conclusively that alterations for the purpose of increasing the number of families for which the building is intended, without materially increasing the capacity or the sanitary conveniences of the building, is most dangerous from a sanitary and moral point of view, and represents in this city the worst type of dwellings.

The tendency in legislation in the cities of this country has been to exercise a very limited control over reconstruction of houses and a very considerable control, where control exists, over new construction. This has made it possible for enterprising individuals to purchase old small buildings and by some slight changes and improvements place, two, three or more families in buildings intended for only one family.

CONDITION OF REPAIR AND MATERIAL.

The necessities brought about by congestion of buildings in the line of safety and fire protection have compelled many cities to create fire zones and restrict wood construction to certain areas outside the densely settled districts of our cities.

While certain fire zones exist in the City of St. Paul, and a certain amount of brick and stone construction is to be found both in new and old buildings 2474 or 80.44 per cent. out of a total of 3078 buildings studied are of frame construction; the other buildings being mainly brick with a few stucco and stone structures.

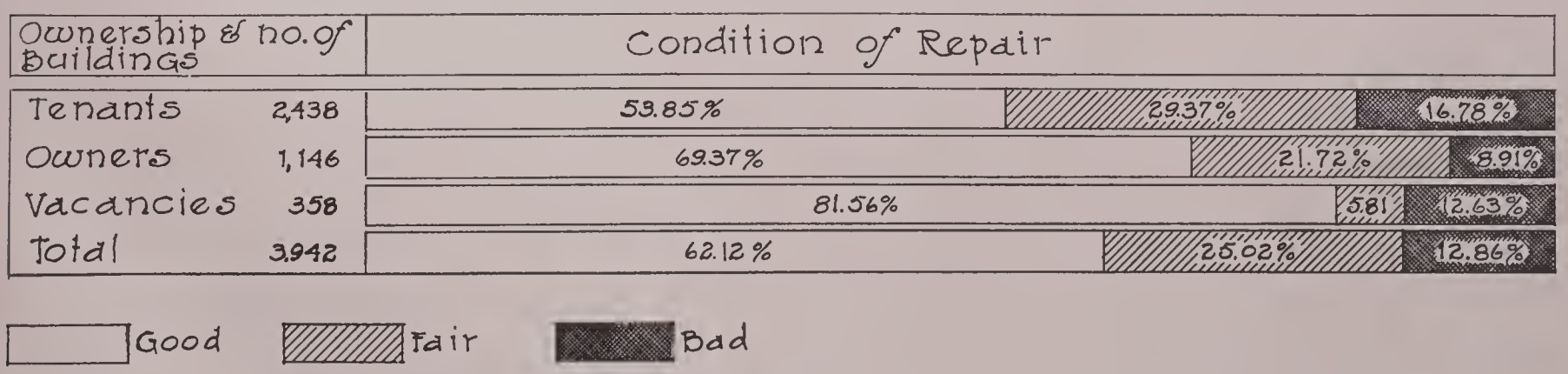
That the whole system of fire zoning which limits itself to specific geographic areas instead of types of structure and density of buildings often works hardship and does not encourage low cost construction of one family houses is certain.

That the condition of repair of the buildings is largely dependent upon the kind of material is evident from the following table:

Table VII. Showing Distribution of Buildings According to Material of Construction and Condition of Repair.

	Good		Fair		Bad		No Information	
Material	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Frame	973	35.15	972	35.05	432	15.48	397	14.32
Brick	77	42.35	40	21.98	33	18.12	32	17.55
Stone	8	66.65	1	8.34	1	8.34	2	16.67
Stucco and Cement	10	76.93	1	7.69	1	7.69	1	7.69
Tar Paper	4	11.84	7	20.38	21	61.84	2	5.94
No Information	12	19.05	15	23.84	5	7.86	31	49.25
Total	1,084	35.22	1,036	33.64	493	16.03	465	15.11

If we eliminate the buildings concerning which the information was not sufficiently accurate for use, we find that the frame buildings were in good repair only in 45.4 per cent as compared with 51.33 per cent in the case of the brick buildings. The buildings of stucco and stone were not sufficient in number to bear comparison.



Condition of Repair of Buildings According to Ownership.

Perhaps the worst condition was found in the tar paper buildings which are sort of embryonic homes indicating in many instances a keen desire for home ownership without the necessary financial resources required for the construction of a house. It is difficult to estimate how much of this desire for home ownership is genuine and how much is due to the kind of shiftlessness that leads families to settle in the most unattractive areas, such as the "Flats," with a view to avoiding payment of rent and remain content with the lowest possible standard of housing. We are led to the belief that both types of families resort to this type of construction and in some instances real estate speculators have been quick to seize upon this desire for home ownership and have disposed of properties which they have allowed to be built up with tar construction, thereby creating a home owning class of slum residents whose health is exposed to greater menace from the sanitary and moral point of view than in some of the worse tenement areas. One of the worst districts of this type recently developed is in what is called the Riverside District.

Those who had the opportunity to observe conditions while the investigation was in progress and the field agents engaged in the housing survey were frequently struck by the condition of neglect found in many buildings where broken doors, dangerous stairs, tumbledown porches, missing cellar doors, broken walls through which the outer air could penetrate, broken and leaking roofs were among the conditions noted. A mere tabulation of such conditions would be a very feeble way of expressing evils that even the photograph could not fully portray. For a more detailed analysis of the conditions of repair we could do no better than to refer the reader to a few of the scores of photographs that were taken in the course of this inquiry.

That certain sections of the City were worse than others is shown by the following table:

Table VIII. Showing the Distribution of the Condition of Repair of Buildings According to Districts Studied.

	Good		Fair		Bad		No Information	
District	No.	Percent	No.	Percent	No.	Percent	No.	Percent
I	53	31.33	46	27.29	47	27.78	23	13.6
II	143	40.34	108	30.47	55	15.54	48	13.65
III	6	16.67	3	8.34	3	8.34	24	66.65
IV	34	28.57	41	34.45	22	18.49	22	18.49
VIII	64	28.38	74	32.71	27	11.94	61	26.97
IX	83	41.35	58	28.82	50	24.85	10	4.98
X	190	38.77	148	30.2	70	14.29	82	16.74
XI	17	21.26	25	31.22	38	47.52		
XII	135	32.5	155	37.3	67	16.18	58	14.02
XIV	122	39.29	117	37.56	20	6.44	52	16.71
XV	66	32.04	88	42.69	31	15.05	21	10.22
XVI	54	72.96	9	12.16	6	8.12	5	6.76
XVII	102	33.66	118	38.95	46	15.18	37	12.21
XVIII	15	15.93	46	48.86	11	11.76	22	23.45
Total	1,084	35.22	1,036	33.64	493	16.03	465	15.11

Table VIII is more interesting for the evidence it fails to give than for any consistency or resemblance of relationship between the figures. The very best conditions found in the ninth district seem to exist parallel with some of the worst conditions. The only deduction that can be made from these figures are that conditions of bad repair in large proportion are tolerated where both tenants and owners of many houses are making an effort to maintain a high standard of repairs. Frequently officials are called upon to compel necessary repairs but always the plea of poverty on the part either of tenants who fear an increase in rental or of owners who prefer to allow their buildings to fall into disrepair, deters

action. The plea of poverty while justifiable in the case of the individual owner, is from the point of view of the community an injustice to the owners who keep their properties in good repair since real estate values are dependent as much upon neighborhood conditions, as upon the actual conditions of properties valued. Investigation carried on in the City of Philadelphia, however, showed that even where the authorities have compelled extreme repairs and improvements of houses the cost of these improvements had no material effect upon rental rates. A neighborhood that is deteriorating as a whole is bound to reach a point within a short time where it must be removed, but mixed neighborhoods are a menace because of the good conditions that prevail in a limited area which are a protection to the worse conditions. That such is the case in St. Paul is evident to every one familiar with the poorer sections of the City. The injustice that this condition works upon the decent properties needs no emphasis altho it emanates from a certain commendable, if not enlightened sense of charity on the part of the legal and administrative authorities.

CONDITION OF REPAIR IN APARTMENTS AND VACANCIES.

While the condition of repair on the outside of the apartment depends to a considerable extent upon the general standard of the neighborhood, the condition of repair on the inside of the individual apartments is largely a matter of housekeeping standards on the part of the occupant and the supply of homes in the district in which the people have been living. That the local supply in the sense of neighborhood supply of houses is an important factor is well known among social workers who are constantly encountering difficulties in the way of removing families both because of the cost of moving long distances and

Rear room of butcher shop. Bad condition of repair.

because of the family and friendly connections which are established in the course of years and which constitute a very significant factor in the lives of the poor and even of the financially more comfortable classes. The expression "We have lived in the neighborhood for twenty or thirty years" is not uncommon even among immigrant families.

That in some instances the problem of paying arrearages in rent, or the leniency of the landlord towards the tenant in so far as the prompt payment of rentals is concerned fre-

quently interferes with removals to better quarters was amply shown by the statements made by the tenants in the course of our house to house inquiries. This was particularly true when the photographs were taken in homes which revealed bad conditions. The tenants were sometimes so much under the influence of the owners as to ask that the fact of their permitting the photograph to be taken be kept from the owners.

A classification of the apartments according to ownership vacancies and condition of repair shows the following distribution:

Table IX. Showing the Distribution of Apartments according to Ownership of Building, Condition of Repair and Vacancies.

	Condition of Repair						
Ownership	Good		Fair		Bad		Total
Tenants	1,313	53.85	716	29.37	409	16.78	2,438
Owners	795	69.37	249	21.72	102	8.91	1,146
Vacancies	292	81.56	21	5.81	45	12.63	358
Total	2,400	62.12	986	25.02	556	12.86	3,942

Information concerning condition of repair in the interior of the apartments was gathered in 3942 apartments and in the distribution of conditions is shown in the above table. It is evident that the condition of repair in the rented apartments was worse than in the apartments that were occupied by the owners as there were twice as many apartments in bad condition of repair among the rented as compared with the owned apartments.

Perhaps the most telling fact revealed by this table is the high proportion (81.56 per cent.) of unrented apartments in good repair as compared with either the rented apartments (53.85 per cent.) or the apartments occupied by the owners (69.37 per cent.). The largest proportion of apartments in bad repair was found, as is to be expected, among the rented apartments.

It would seem, therefore, that the occupancy of apartments in bad repair is not due to a shortage of accommodations in good repair, but to other causes which we have not been able clearly to explain to our own satisfaction. It is, of course, true that in some instances the very fact that the apartment was empty gave the owner an opportunity to make the necessary repairs, or, if not, the only other possible explanation of this condition might be found in the fact that he made the necessary repairs in order to obtain a tenant, or else that the houses in better repair were higher in rental than those that were in bad condition of repair. In order to verify the latter contention sixty apartments in bad condition of repair were studied in relation to rent. Of these, 30 were occupied by tenants and 30 were unoccupied. In the case of the unoccupied houses we were compelled to interview the agents or owners. It was found that the average rent per room in the cases of the unoccupied apartments was $2.07 per month as compared with an average rent per month per room for rented

Yard conditions. Stables close to house.

occupied apartment of $1.98. This difference is so slight as to have no particular influence upon the choice of homes on the part of the tenants. It cannot be doubted that other causes such as arrearages in payments of rent, especially desirable sizes of apartments and favorable location from the point of view of place of employment, proximity to places of amusement and racial or national gregariousness have a tendency to keep families in the same home despite conditions which they neither desire nor create themselves. That in some cases poor families living in the poorer districts of our cities are responsible for the neglect of their home surroundings, and abuse property in a manner that is nothing short of criminal must be admitted. It is clear to any one investigating conditions first hand, however, that these cases are rare and are

usually referred to by owners as indicative of conditions which they have to contend with as if they were the general rule, instead of being the exception. Potatoes in the bath tub and goats in the parlor have been reported in other cities as indicative of the tenant problem which the owner has to deal with. I have found that the tub used for potatoes could under no circumstances be used for bathing as there was no means of securing hot water and no way of heating the bathroom; while the classic story of the goat in the parlor turned out to be a case of cruelty to animals when the condition of the parlor was considered.

No. Families	No. Bldgs.	Percentage			
1	1984	33.85	34.6	16.65	14.09
2	758	36.94	33.47	13.96	15.63
3	110	33.64	37.27	18.18	10.91
4	105	50.46	23.81	15.24	10.49
5	21	38.08	19.05	23.81	19.06
6	22	13.63	45.45	27.28	13.64
7	9	33.34	22.22	22.22	22.22
8	2	50.0		50.0	
9	4	50.0		50.0	
No Inf.	63	38.08	17.46	19.07	25.39
Total	3078	35.22	33.64	16.03	15.11

Good Fair Bad No Information

Condition of Repair of Buildings According to Number of Families.

VACANCIES.

It has been shown that the vacant apartments were in good condition of repair in larger proportion than either the apartments occupied by tenants or owners. This would seem to indicate that vacancies do not depend upon the condition of repair but upon some other causes which we have endeavored to suggest, but there is no kind of evidence that could be gathered in a form which would measure the effects of any of the factors suggested.

Condition of Bedroom. House partly occupied.

Out of a total of 4482 apartments examined 2703 or 60.31 per cent. were occupied by tenants, 1254 or 27.97 per cent were occupied by owners and 525 or 11.62 per cent. were vacant. This large proportion of vacant apartments, more than four-fifths of which were in the best condition of repair, represents practically the profit that is ordinarily expected from properties, at least *en gros,* and from the point of view of the community represents the double loss of good accommodations remaining unoccupied and the unprofitable vacancies which should be yielding a revenue to the community.

To what extent the proportion of such properties can be reduced through careful social service connected with the ownership of properties will be pointed out in the latter part of this report in which we shall deal with remedies.

Toilets and Baths

TOILET FACILITIES.

It seems strange that at the present day those interested in housing reform should still find themselves in the "toilet period" of housing reform. I call this the "toilet period" because in the course of our inquiry we were still compelled to devote a considerable portion of our time to the examination of toilet conditions that should make any community blush with shame for tolerating. The photographs which are more forceful in interpreting to the public the conditions that actually exist and which make all statement regarding the conditions practically unnecessary, are especially called to the attention of the reader.

The reason for the existence of such conditions while in many instances attributable to the tenants, is nevertheless the full responsibility of the Health Department which may not be able to cope with the situation both because of limitations in the inspection force and a lack of efficiency, and because the courts are frequently unwilling or unable to realize the importance of using their judicial power in the protection of the health of the people with the same sense of justice that guides them in the protection of mere property.

It may not be fair to assume that the Judges of St. Paul are not able to see clearly their duty in relation to health problems with the same degree of judicial fairness to the injured parties that they apply to other problems of human relationships, but if they do see their duty clearly and have been ready to act, but the Health Department or any other Department of the City government has failed to bring the matter to their attention, those responsible for such neglect should bear the reward of public condemnation, and of judicial or administrative action in removing them from office. Property can be reproduced, health cannot; and judicial action in this case should precede rather than follow the act of offending against the health of the people.

Let us see for a moment what the conditions found in the toilets were, and what factors have contributed toward the creation of these conditions. Table X shows the location of toilets, which is the first element in determining the cleanliness and lighting.

Table X. Showing Distribution of Toilets According to Location.

Location	Number	Percentage
Yard	1,220	30.37
Bath	1,662	41.38
Hall	249	6.20
Basement	188	4.67
Apartments	546	13.58
No. Inf.	153	3.80
Total	4,018	100.00

The above figures when considered as relating to some of the poorer sections of St. Paul are sufficient to explain, at least in part, the reason for the serious conditions which were found. Out of a total of 4018 toilets

Outhouse in shed on 14th St.

41.24 per cent. were located outside of the apartments, either in the yards or in the halls and basements. Of all objectionable places for toilet facilities the location in the basement is the most objectionable, altho the location in dark halls as was so frequently the case, is by no means greatly more to be desired.

Attention should especially be called to the 546 toilets located in the apartments but not connected with a bath. In many instances these toilets were in very insanitary condition and interfered with the privacy of the members of the family, and made privacy, where there were lodgers, practically impossible.

Toilet and water in basement used by six families.

A further analysis of our data relative to the conditions of toilets and their location gives the following distribution:

Table XI. Showing Distribution of Toilets According to Location and Condition of Cleanliness.

Location	No.	Condition				No Inf.
		Clean	Dirty	Filthy	Nuisance	
Yard	1,220	623	411	85	68	33
Bath	1,662	1,346	246	17	34	19
Kitchen	377	237	110	8	11	11
Hall	249	150	78	7	6	8
Basement	188	90	72	11	10	5
Bedroom	88	71	16	1		
Dining room	33	24	7	2	0	0
Closet	16	14				2
Storeroom	14	6	4	3	1	
Attic	9	6	2	1		
Parlor	5	4	1			
Living room	4	4				
No Inf.	153	70	41	12	10	20
Total	4,018	2,645	988	147	140	98

Table XIa. Showing Percentage of Distribution of Toilets According to Location and Condition of Cleanliness.

Location	Condition of Toilets				No Inf.
	Clean	Dirty	Filthy	Nuisance	
Yard	51.13	33.67	6.95	5.55	2.70
Bath	80.99	14.81	1.02	2.04	1.14
Kitchen	62.84	29.20	2.12	2.92	2.92
Hall	60.22	31.35	2.81	2.41	3.21
Basement	47.85	38.32	5.85	5.32	2.66
Bedroom	80.68	18.18	1.14		
Dining room	72.73	21.21	6.06		
Closet	87.50				12.50
Storeroom	42.86	28.59	21.41	7.14	
Attic	66.65	22.24	11.11		
Parlor	80.00	20.00			
Living room	100.00				
No Inf.	45.73	26.81	7.84	6.54	13.08
Total	65.80	24.61	3.66	3.49	2.44

The above table shows a greater variety of location of toilets than Table X and reveals haphazard placement that is bound to prove undesirable in many cases. We find, for example, that bedrooms, closets, dining rooms, parlors and living rooms are selected for the location of toilets instead of separating them in some way from the living quarters in order to afford ventilation and privacy.

The fact that out of a total of 1220 toilets located in the yard only 623, or 51.06 per cent. were clean and the rest were, dirty in 33.7 per cent. of the cases, filthy in 6.97 per cent. of the cases and a nuisance in 5.57 per cent. of the cases, shows how dangerous it is to place toilets outside of the apartment. If we consider, on the other hand, the toilets located in the apartments we find that there is a distinct difference in the condition of cleanliness which is favorable to the bath room toilet. Out of a total of 1662 toilets located in bathrooms 80.98 per cent. were clean and 14.18 per cent. were dirty. In only 1.03 per cent. were the conditions designated as filthy and in 2.04 per cent. as a nuisance. This distribution of conditions of bath rooms also tends to show that in the vast majority of cases bathrooms are not misused.

The fact that out of a total of 4018 toilets examined, 147 were filthy and 140 constituted a nuisance from the point of view of cleanliness alone, shows that there is considerable neglect on the part of the authorities in the inspection of toilets. That the tenants are

some times responsible for the conditions that exist is not to be questioned, but this should be no justification for tolerating such conditions.

The cleanliness of toilets while primarily a matter of housekeeping is also dependent upon the possibility for placing responsibility upon those using them. Toilets located outside of the apartments cannot be supervised and as will be shown later where there is a sharing of toilets with a number of families or even with one, cleanliness is not practicable, whether that be among foreigners who are unaccustomed to modern plumbing or among Americans experienced in the uses of such plumbing.

VENTILATION OF TOILETS.

In the course of our various inspection of toilet conditions, one of the most serious evils was the complete disregard of the need for ventilation. This was especially surprising where every opportunity for providing adequate ventilation existed, but the owners or builders had deliberately, or through ignorance, neglected to make the necessary provisions.

Sink and toilet used by six families.

The figures relating to the distribution of toilets according to provisions for ventilation are contained in the following table:

Table XII. Showing distribution of toilets according to location and provisions for ventilation:

Location	No.	Ventilation Adq.	Poor	None	No Inf.
Bath	1,662	1,355	158	32	117
Kitchen	377	207	61	80	29
Hall	249	66	35	81	67
Basement	188	48	59	37	44
Bed room	88	47	12	16	13
Dining room	33	11	7	14	1
Closet	16	8			8
Storeroom	14	4	2	5	3
Attic	9	4	5		
Parlor	5	1	3	1	
Living room	4	3			1
No inf.	153	55	24	26	48
Total	2,798	1,809	366	292	331

Table XIIa. Showing percentage distribution of toilets according to location and provisions for ventilation:

Location	Ventilation of Toilets Adq.	Poor	None	No Inf.
Bath	81.51	9.51	1.93	7.05
Kitchen	54.89	16.29	21.23	7.59
Hall	26.45	14.15	32.48	26.92
Basement	25.55	31.39	19.68	23.38
Bed room	53.38	13.64	18.19	14.79
Dining room	33.32	21.23	42.43	3.02
Closet	50.00			50.00
Storeroom	28.58	14.25	35.75	21.42
Attic	44.45	55.55		
Parlor	20.00	60.00	20.00	
Living room	75.00			25.00
No inf.	35.95	15.68	16.99	31.38
Total	64.65	13.09	10.42	11.84

The above figures show that no provision for ventilation existed in 292 toilets or 10.42 per cent. of the total examined. This does not take into account the yard toilets which with practically no exception had inadequate venti-

lation, unless the doors were out of order as was frequently the case. The latter condition made privacy impossible. Some of our photographs show the character of some of the yard toilets which had the doors out of order or missing.

Basement containing chickens, fish, pigeons, spring and toilet.

It is interesting to note that the toilets located in the bathroom were adequately ventilated in more than four-fifths of the cases (81.51 per cent), while those located in halls, storerooms, dining rooms, parlors, were well ventilated in less than one-third of the cases. The fact that 21.23 per cent. of the toilets located in kitchens had no facilities for ventilation whatever, shows the situation quite clearly. The toilets located in the halls reveal a still more serious situation, as out of 249 as many as 81 or 21.23 per cent. were without any means of ventilation and 61 or 16.29 per cent. were poorly ventilated.

It is clear to any one familiar with local conditions that an effort on the part of the Health Department, or some other department in which the control of housing sanitation might be placed, could improve the conditions of ventilation in from 50 per cent. to 75 per cent. of the toilets which are now either without ventilation or poorly provided with means of ventilation without compelling costly alterations or serious structural changes in buildings.

REPAIR OF TOILETS.

The character of repair of toilets is often responsible for the condition of uncleanliness. It can hardly be expected that a toilet that does not flush properly or has no flushing facilities would be kept clean, nor are broken seats and dangerous floors conducive to careful use of such toilets.

A tabulation of the figures relating to condition of repair gives some very interesting results:

Table XIII. Showing number of toilets according to location and condition of repair:

Location	No.	Repair Good	Fair	Bad	No Inf.
Yard	1,220	233	465	470	52
Bath	1,662	1,317	187	119	39
Kitchen	377	249	75	48	5
Hall	249	146	37	43	23
Basement	188	92	34	50	12
Bed room	88	65	10	11	2
Dining room	33	18	7	8	
Closet	16	10		2	4
Storeroom	14	8		6	
Attic	9	3	6		
Parlor	5	2	2	1	
Living room	4	4			
No. Inf.	153	71	27	27	28
Total	4,018	2,218	850	785	165

Table XIIIa. Showing percentage of number of toilets according to location and condition of repair:

Location	Repair of Toilet Good	Fair	Bad	No Inf.
Yard	19.11	38.13	38.51	4.25
Bath	79.24	11.26	7.16	2.34
Kitchen	66.06	19.89	12.73	1.32
Hall	58.63	14.86	17.27	9.24
Basement	48.95	18.09	26.59	6.37
Bed room	73.87	11.36	12.50	2.27
Dining room	54.54	21.21	24.25	
Closet	62.50		12.50	25.00
Store room	57.14		42.86	
Attic	33.35	66.65		
Parlor	40.00	40.00	20.00	
Living room	100.00			
No Inf.	46.40	17.65	17.65	18.30
Total	55.18	21.16	19.55	4.11

Toilets on Phalen Creek.

The above figures show that almost one-half of the toilets were either only in fair repair or were entirely out of repair. It is quite interesting to note that toilets located within apartments are most frequently in good repair and that those located in the bath rooms show a proportion of 79.24 per cent. in good repair as against 48.95 per cent. in good repair of those located in the basements. Eliminating the few toilets located in the store rooms, almost one half of which, 42.86 per cent., were in bad repair, the yard toilets showed the greatest frequency of bad repair, with the basement toilets next in order.

Many of these defects were trifling, while others were very serious and were a menace to both health and safety. That much of the worst kind of disrepair was due to neglect on the part of the owners to prevent further deterioration by a small expenditure at the beginning, was evident from many of the conditions found.

LIGHTING OF TOILETS.

Closely associated with condition of repair and cleanliness, but especially cleanliness, is lighting. In our tabulation little attention has been paid to the lighting of yard toilets which are almost invariably constructed on the old model with the moon shaped aperture or small window which does not open. A tabulation of the lighting condition of the toilets located within the building shows the following:

Table XIV. Showing distribution of toilets according to location by condition of lighting:

Location	No.	Light	Light Gloomy	Dark	No Inf.
Bath	1,662	1,290	179	73	120
Kitchen	377	188	77	84	28
Hall	249	53	29	121	46
Basement	188	29	56	59	44
Bed room	88	38	13	25	12
Dining room	33	8	12	12	1
Closet	16	4	3		9
Store room	14	4	2	5	3
Attic	9	4	5		
Parlor	5	2		3	
Living room	4	3			1
No Inf.	153	60	20	29	44
Total	2,798	1,680	396	411	308

Table XIVa. Showing percentage of distribution of toilets according to location by condition of lighting:

	Lighting of Toilets			No
Location	Light	Gloomy	Dark	Inf.
Bath	77.63	10.76	4.39	7.22
Kitchen	49.88	20.41	22.29	7.42
Hall	21.29	11.65	48.58	18.48
Basement	15.42	29.79	31.39	23.40
Bed room	43.17	14.78	28.41	13.64
Dining room	24.25	36.36	36.36	3.03
Closet	25.00	18.75		56.25
Store room	28.59	14.29	35.71	21.41
Attic	44.44	55.56		
Parlor	40.00	60.00		
Living room	75.00			25.00
No Inf.	39.24	13.08	18.91	28.77
Total	60.14	14.16	14.68	11.02

Only 60 per cent. of the 2798 toilets located within the buildings were lighted satisfactorily and 396, or 14.16 per cent. were gloomy, while 411, or 14.68 per cent. were dark. In other words, there was a greater proportion of dark toilets than there was of the type that were gloomy.

The toilets located in the bath rooms were more frequently provided with adequate lighting facilities than the toilets located in any other part of the building. The basement and hall toilets were as objectionable from the

Partitioned toilet in kitchen. Open at top. No other ventilation.

point of view of lighting as from the point of cleanliness, repair and ventilation.

Throughout our entire investigation, the basement and hall toilets were a serious menace to the safety and health of the tenants.

Basement Toilet.

NUMBER OF FAMILIES USING TOILETS.

We have referred in the early part of this chapter to the dangers of divided responsibility in the use of toilets. The following table shows to what extent this division of responsibility exists.

Table XV. Showing number of toilets according to number of families using them and their location:

No. Families Using	Location—Yard No. of Compartments					No Inf.	Hall	Apts.	Total
	1	2	3	4	6				
1	697	25	1	1		36	73	2,407	3,240
2	138	85	1	2	1	4	36	161	428
3	20	20	5		1	1	18	7	72
4	4	11	4	3			12	3	37
5		8			2			2	12
6			1				4		5
7								2	2
8	1		2	2	1		1		7
9							2		2
Public	5	1				1			7
No Inf.	44	7				58	1	7	117
Total	909	157	14	8	5	100	147	2,589	3,929

Shed Outhouse.

The sharing of toilets in yards is a very common practice, and it is not surprising that out of a total of 909 toilets with one compartment, 697 or 76.67 per cent are used by one family only, and 168 yard toilets are used by two or more families.

The most surprising fact revealed by the above table, however, is to be found in the sharing of toilets by more than one family when that toilet is located in a private apartment. Out of a total of 2589 toilets located in apartments, 175 were being used by at least one additional family besides the one in whose apartment it was located. While this is not an exorbitant proportion, it involves 379 families or about one-ninth of the total number of families studied in the course of this inquiry.

A still better conception of the extent of toilet sharing can be obtained from the study of table XVI.

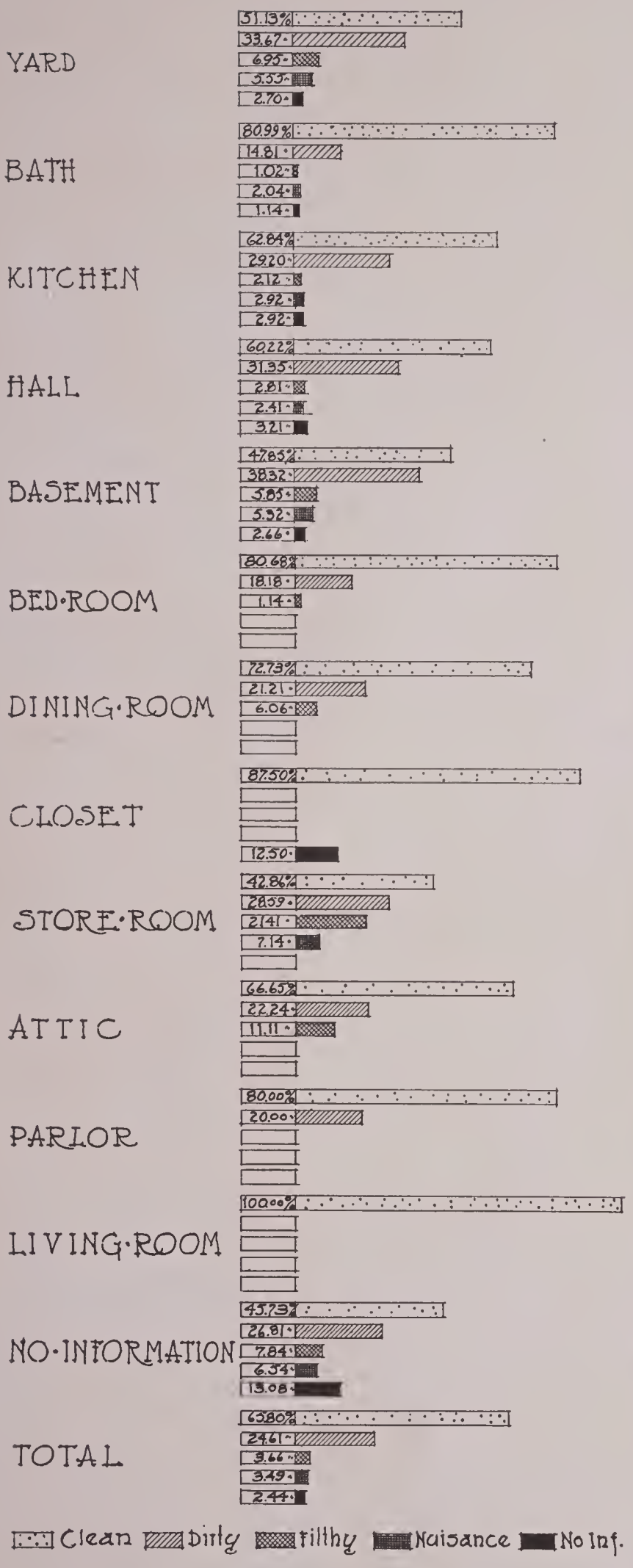
Table XVI. Showing the distribution of average number of toilets per family according to general location by districts:

District	1	2	3	4	8	9	10
Yard	1.33	1.1	1.22	1.19	1.13	1.24	1.36
Hall	1.6	4.12		2.63	1.	2.71	1.12
Apts.	1.	1.03	1.	1.11	1.17	1.09	1.08
Total	1.19	1.1	1.2	1.34	1.15	1.25	1.12

District	11	12	14	15	16	17	18	Total
Yard	1.	1.09	1.33	1.08	1.36	1.15	1.15	1.19
Hall	1.	2.58	1.	1.16	2.33	1.		2.19
Apts.	1.	1.07	1.05	1.06	1.12	1.1		1.07
Total	1.	1.15	1.14	1.07	1.19	1.13	1.15	1.15

This table shows that the largest average number of families per toilet is to be found in the buildings where the toilets are located in the halls. If we remember that these were also the toilets with the poorest lighting facilities and the most inadequate means of ventilation, the seriousness of the objection to hall toilets is apparent. That in many cases the stench from these hall toilets, especially when out of repair, permeated the atmosphere of the entire building was often evident, and the complaints of the tenants regarding this evil were quite numerous.

SPECIFIC CONDITION OF TOILETS.



Distribution of Toilets According to Condition of Cleanliness and Location.

The statistical discussion of the condition of toilets can be concluded in no way more forcefully than by repeating in their original form some of the notes taken at random from the cards used by the field workers in the course of their investigation. These notes were not originally intended for publication but merely for the guidance of the photographer.

"Odor from toilets very bad. They are set on ground with only small hole."

"Place is filthy. Hamburger machine and filthy toilet about 10 feet apart."

"Plumbing in bath all held together with string and rags."

"One toilet on this place so overful it was boarded up—filthy place."

"Four families using one toilet that is situated off kitchen in one apartment.' '

"Recommend for photo one toilet compartment under stairs (second floor) used by seven apartments on second and third floors."

Basement Toilet, Sibley St.

"Cesspool here has not been cleaned for over 6 years and backs up and comes into house. Tenants say the odor is awful in hot weather. The people lived here six years and in all that time it has not been cleaned. It is about 10 feet from house. Also house next door is connected with same cesspool."

"Toilet in cellar used by shop and two families. Toilet dark and damp,—very bad shape. Storeroom for butcher shop in connection with the toilet. Place very dirty and insanitary."

"Toilet 20 feet from house and a lake between it and house. Toilet under water."

"Toilet partly under water at rear of stable."

"Toilet is a hole dug in sand in mushroom cave vicinity. Three families use this."

"Toilet in cave at higher level than cave containing spring water."

"Vessel used as toilet. Bad odor in rear of store."

"The families at 19, 23, 25, 27, 29, and 31, in fact all the houses in the row use toilet in basement of 110 ——— Street."

"One bathroom partitioned off corner of a larger room. No ventilation—no air. Used by nine (9) apartments, twenty (20) individuals."

"Toilet in basement. Home-made box for tank. Fixture broken,—filled up—mouldy—awful, (left hand.)"

"Outside W. C. vault full and rubbish on top."

"Pail used as toilet, never emptied."

"Remains of old cesspool under home."

"Toilet in shed used by the thirteen (13) people living here. (Three of whom are under five years). The spring which supplies drinking water is in the same shed. Condition; dirty, dark and no ventilation."

"Shed has spring pipe emptying into it with toilet on other side. Family also uses same spring for drinking water supply."

"Outside toilet in very bad condition, nothing but a few boards put together. It is located in carriage shed."

"No water all winter until June 7th and no toilet at all. Are using kitchen in vacant house next door as toilet."

"Yard toilet is almost falling down, no seat, and most of roof gone."

"Toilet: only ventilation is through bakery."

"The toilet is badly situated and could not be ventilated except through the living room."

Perhaps these few quotations will suffice to indicate the menace that the toilet problem in this city represents, leaving to the statistical tables to give some conception of the extent of the problem represented by the specific instances given in the above quotations.

In the course of our investigation we were greatly impressed with the large number of families that had baths attached to their homes. This proportion is greater than any that is ordinarily found in the poorer districts of eastern cities. The distribution of families with and without baths according to districts is as follows:

Table XVII. Showing distribution of families according to bathing facilities by districts and number of families using each bath:

		Families Having No Bath	Families Having Bath					
				Families Using				
		No.	Total	1	2	3	4	6	7
District	1	189	92	91		1			
District	2	308	193	192		1			
District	3	29	2	2					
District	4	163	31	26	5				
District	8	73	225	204	16	1	1	2	1
District	9	94	190	153	31	4	1	1	
District	10	287	440	385	53	2			
District	11	84	3	3					
District	12	311	319	280	30	5	4		
District	14	265	119	116	3				
District	15	140	80	74	6				
District	16	51	55	36	17	1	1		
District	17	232	88	81	5	1	1		
District	18	104							
Total		2,330	1,837	1,643	166	16	8	3	1

Table XVIIa. Showing percentage of distribution of families according to bathing facilities by districts and number of families using each bath:

		Families With Bath	Families Without Bath	No. Families Using Bath					
				1	2	3	4	6	7
District	1	67.25	32.75	98.91		1.09			
District	2	61.45	38.55	99.95		.05			
District	3	93.55	6.45	100.00					
District	4	84.11	15.89	83.88	16.12				
District	8	24.51	75.49	90.67	7.13	.44	.44	.88	.44
District	9	33.09	66.91	80.52	16.33	2.11	.52	.52	
District	10	39.49	60.51	87.50	12.05	.45			
District	11	96.55	3.45	100.00					
District	12	49.38	50.62	87.76	9.41	1.57	1.26		
District	14	69.01	30.99	97.48	2.52				
District	15	63.62	36.38	92.50	7.50				
District	16	48.12	51.88	65.48	30.88	1.82	1.82		
District	17	72.50	27.50	92.05	5.67	1.14	1.14		
District	18	100.00							
Total		55.98	44.02	89.46	9.03	.87	.43	.16	.05

Out of a total of 4167 families for which information was gathered, 2330, or 55.98 per cent. had no bathing facilities in their homes,

Note outhouse with piece of tin for door. West Side Flats.

while 1837, or 44.02 per cent. did have bathing facilities, or at least, some accommodation which might be used for bathing purposes. That many of these baths were in a condition of disrepair was found in 194 cases where they actually could not be used because of bad plumbing. That many had no way of heating water or heating the bathrooms themselves, was found to be the case very often.

One of the most objectionable features of some of the bathing facilities is to be found in the fact that in 194 cases or 10.54 per cent. the bath tubs located in the hall or in the private apartment of one family were to be used by one or more additional families. The menace to health due to probable contagion and the likelihood of misunderstanding between families as to use and abuse of such bathing facilities would seem to mitigate against frequent or careful use.

With climatic conditions such as we have in the City of St. Paul, which reduce outdoor bathing to only six or seven weeks in the year, and the failure on the part of the City to provide public baths, a condition which singles out this community as one of the most unprogressive among the larger cities of this country, we realize what chance for keeping clean our working classes, compelled to live in homes without bathing facilities, have.

When we consider the distribution of bathing facilities by districts we find that there was not a single bath in the eighteenth district. The eleventh, third and fourth districts had practically no bathing facilities.

When the Amherst H. Wilder Baths were built it was hoped that the municipality would

realize from the success of this enterprise that baths are needed and that the people are eager to use them. So far, however, there has been no action taken by the City government that even contemplates the construction of public baths.

Flat building. One toilet and water in basement used by six families.

Sewers and Water Supply

Two essentials of good housing are sewer connections and water supply. Generally speaking, where there is a water supply there is a sewer system on the streets, and where there is a sewer connected with the house there is also a water supply coming from the general system of the municipality.

When we consider the poorer sections of a given community, however, it is found that there is no very close relation between the proportion of buildings supplied with water and those having sewer connections.

An examination according to districts of the available sewer facilities and water supply shows the following distribution according to districts.

Table XVIII. Showing total sewerage and city water supply by districts:

TOTAL HOUSES

District	Sewer	No Sewer	No Inf.	City Water	No City Water	No Inf.
I	60	83	13	83	65	8
II	162	137	5	244	58	2
III	2	27	1	2	27	1
IV	43	54	5	55	42	5
VIII	198	1	1	200		
IX	169	4	17	175		15
X	438	63	18	495	8	16
XI	9	65	4	10	63	5
XII	366	23	6	377	12	6
XIV	231	63	24	287	9	22
XV	150	33	14	176	9	12
XVI	54	18	1	60	13	
XVII	102	176	5	140	137	6
XVIII		97			97	
Total	1984	844	114	2304	540	98

Table XVIIIa. Showing percentage total sewerage and city water supply by districts.

PER CENT HOUSES

District	Sewer	No Sewer	No Inf.	City Water	No City Water	No Inf.
I	38.45	53.23	8.32	53.23	41.65	5.12
II	53.27	45.09	1.64	80.25	19.09	.66
III	6.66	90.00	3.34	6.66	90.00	3.34
IV	42.13	52.96	4.91	53.92	41.17	4.91
VIII	99.00	.05	.05	100.00		
IX	88.99	2.11	8.90	92.21		7.79
X	84.42	12.12	3.46	95.38	1.54	3.08
XI	11.54	83.34	5.12	12.83	80.76	6.41
XII	92.69	5.79	1.52	95.44	3.04	1.52
XIV	72.65	19.80	7.55	90.25	2.83	6.92
XV	76.19	16.77	7.14	89.46	4.55	6.09
XVI	73.97	24.66	1.37	82.18	17.82	
XVII	36.07	62.16	1.77	49.49	48.39	2.12
XVIII		100.00			100.00	
Total	67.43	28.69	3.88	78.31	18.36	3.33

Artesian well—Upper Levee.

The above figures show 844 houses or 28.69 per cent. of the total studied not connected with sewers. The situation relative to sewer connections is still worse when we consider specific districts. We find, for example, that District Eighteen which is one of the worst that has come under our observation, and which is located on the Upper Levee, is without any sewer connections whatever, while the Third District on the West Side Levee and practically the entire Eleventh District generally known as Phalen Creek, were without sewer facilities. The situation relative to sewer connections is also quite serious in the Seventeenth District, the district which consists of the West Seventh Street District to the River. The makeshifts for drainage, the repulsive condition of

Sink drains through side of house into yard.

yards and pollution of Phalen Creek, which is nothing more than an open sewer, indicate a need for a better development of drainage facilities in some sections, at least, that could with difficulty be equaled in cities of the size of St. Paul. Some of the photographs reproduced in this report show the absence of drainage facilities, and the conditions that attend failure to provide proper drainage. CITY WATER is one of the essential requirements of health and cleanliness. One spring or pump for from 10 to 20 families, at a distance amounting to from about thirty to a thousand or more feet from the house, is not conducive to high standards of cleanliness, especially during the very severe winters that prevail in this climate. With the City's failure to provide public bathing facilities and the complete absence of an adequate and easily accessible water supply, the condition of filth in homes and the frightful neglect of the personal cleanliness of tenants are not out of keeping under existing circumstances.

In the case of water as in the case of sewers, the Eighteenth District, known as the Upper Levee, had no supply of water beyond such supply as is derived from a spring or a pump. In several instances from five to twenty families shared in one source of water supply and in the Third District, known as the West Side Upper Levee, the supply was wholly inadequate for the number of families using the existing supply.

It may be said that the sewer system and water supply are least adequate where they are most needed, and that where there is an inadequate sewer system there is also a poor supply of water.

Dark area on stove pipe shows high water mark during flood.
Note dark rooms in rear.

Garbage, Ashes and Rubbish

The unsightly appearance of many of the streets and yards in the poorer sections of this City is frequently due to the failure on the part of the owners or tenants to provide and utilize receptacles for the storage of garbage and ashes. That the City authorities share in the responsibility for the failure to provide and use receptacles is clear, since the City ordinances provide that such receptacles should be available in connection with every building in the City of St. Paul.

Rear of Cody Block. Garbage and waste infested with rats.

An examination of the adequacy of the facilities for storing garbage showed the following distribution of buildings according to availability or absence of garbage cans.

Table XIX. Showing distribution of buildings according to presence or absence of garbage cans.

	Receptacles Available		No Receptacles	
District	No.	Per Cent	No.	Per Cent
I	42	29.38	101	70.62
II	144	48.32	154	51.68
III	2	7.14	26	92.86
IV	34	36.15	60	63.85
VIII	145	71.45	59	28.45
IX	118	66.65	59	33.35
X	332	68.22	152	31.78
XI	11	18.04	50	81.96
XII	260	72.82	97	27.18
XIV	163	57.42	121	42.58
XV	118	65.56	62	34.44
XVI	37	59.68	25	40.32
XVII	103	37.85	169	62.15
XVIII			86	100.00
Total	1,509	55.23	1,221	44.77

The above Table shows that out of a total of 2,882 buildings only 1,509, or 55.23 per cent. had receptacles for the storage of garbage. With such inadequate provisions it is to be expected that the families would dispose of such garbage either by burning it, which is more desirable than any other method of disposal, or by throwing it into the alley, street, or yard as the case may be.

The feeding of garbage to animals, particularly chickens, is not uncommon and in some instances saves the surroundings of the home from the conditions that attend failure to dispose of garbage either through municipal collection or incineration in the home.

It is surprising that in the whole of the Eighteenth District, which consists of the Upper Levee, not a single receptacle was found, while the West Side Lower Levee, designated

Yard condition. Manure, garbage and rubbish.

in this report as the First and Third Districts respectively, the proportion of receptacles was only 29.38 per cent. for the Lower Levee and 7.14 per cent. for Upper Levee. The appearance of each of these districts and the frequency of garbage found in yards, cellars, streets, alleys, and open spaces was sufficient to demonstrate the need for adequate receptacles for garbage and the proper collection of such garbage at frequent intervals.

The condition of storage of garbage found is so much more to be regretted when we remember that on March 26, 1917, Mayor Irvin approved an ordinance that reads in part as follows:

Condition of yard. On State St.

Section I.

"'Garbage' shall be construed to mean all vegetable or animal matter which is the refuse or offal of the food of human beings.

Section II.

The owner of every building within the corporate limits of the City of St. Paul, inhabited, used or occupied as a tenement, dwelling-house, lodging house or hotel, or in which any restaurant or lunch-room is conducted, or in which any garbage is produced, shall provide and maintain sufficient, proper and suitable receptables for receiving and holding garbage. Said receptacles shall be of galvanized iron or other metal which will not easily rust and can be readily cleaned, and shall be provided with a close, well-fitting lid of the same material, and shall not be less than ten gallons nor more than twenty gallons capacity.

Section III.

The lid shall always be kept upon such garbage receptacles, and when removed for necessary purposes shall be immediately replaced. * * *

Section IV.

* * * * * * * * *

Section V.

All garbage receptacles shall be kept on the ground floor or yard in the rear of the premises at a place easily accessible to the garbage collector. * * *

Section VI.

Any person violating the provisions of this ordinance shall be punished by a fine of not less than Five Dollars or more than One Hundred Dollars, or by imprisonment for not exceeding ninety days.

While the ashes do not constitute a menace from the sanitary point of view, their presence in the yards, cellars, alleys or streets creates a condition which merely adds to the already unattractive atmosphere of given districts. It must be admitted that during the winter months it is difficult to remove ashes at regular intervals, and that the snow and ice are a factor in promoting the delay of such removal.

Junk yard surrounded by dwellings. Fire hazard and infested with rats.

Our investigation, however, was carried on during the spring and part of the summer months when the removal of such ashes could not be considered difficult. The following Table shows the distribution of buildings according to provision of storage facilities for ashes:

Table XX. Showing number and proportion of buildings for which ash cans were provided.

	Ash Can		No Ash Can	
District	No.	Per Cent	No.	Per Cent
I	15	12.45	106	87.55
II	38	13.37	246	86.63
III			24	100.00
IV	8	9.51	76	90.49
VIII	40	20.74	153	79.26
IX	52	31.53	113	68.47
X	144	30.57	327	69.43
XI			60	100.00
XII	104	31.24	229	68.76
XIV	52	19.05	221	80.95
XV	43	25.75	124	74.25
XVI	23	37.09	39	62.91
XVII	24	9.12	239	90.88
XVIII			87	100.00
Total	543	20.99	2,044	79.01

The proportion of houses which had provision for the storage of ashes was 20.99 per cent. which is pitifully inadequate. In three of the districts studied no ash cans were found, on any of the premises examined, and in one district only 9.51 per cent. of the buildings and yards examined had adequate provision for the storage of ashes.

The fact that the ashes accumulate in yards, cellars, and streets is shown in some of our photographs, but the serious menace that the failure to collect ashes in proper receptacles presents is the danger that comes from mixing such ashes with garbage and other perishable materials which constitute a danger to health through the accumulation of vermin of every kind. One of the most serious conditions of accumulation of filth was found in a yard where ashes made foundations for a dump that was reeking with vermin and where the rats were actually terrorizing the neighborhood.

ACCUMULATION OF RUBBISH AND YARD DRAINAGE are essential factors in determining the surroundings of the home. Where yards do not drain properly and rubbish is permitted to accumulate, the conditions are bound to become unattractive, making it impossible for the families to use the yards and driving children into the streets, especially in the areas where there are no adequate playground facilities.

Below is a Table showing the distribution of condition of yards according to character of drainage and presence of rubbish according to districts:

Table XXI. Showing the distribution of condition of yards according to character of drainage—by districts.

YARD—DRAINAGE*

Dist.	Sewer	Surface	Adequate, No Special Pro- Prov.	Swampy	Water	No Infor- Infor- mation
I	1.47	61.02	12.5	14.71	2.94	7.36
II	7.08	66.95	.39	9.45	8.26	7.87
III		55.56		33.33		11.11
IV	1.16	86.06		6.97	1.16	4.65
VIII	6.18	83.72	.56	1.68		7.86
IX	5.24	79.57				15.19
X	7.95	76.14				15.91
XI		87.18				12.82
XII	.52	86.98				12.50
XIV		87.54	.30	.30		11.86
XV		86.42				13.58
XVI	3.17	82.56				14.27
XVII	.68	81.96				17.36
XVIII		94.2		1.45		4.35
Total	3.20	80.59	.72	2.06	.93	12.48

*For want of space we have eliminated the numbers and used only percentage figures.

Table XXIa. Showing the distribution of condition of yards according to presence of rubbish—by districts.

YARD—RUBBISH*

Dist.	Free	Some	Much	Nuisance	No In- formation
I	22.8	33.11	27.21	13.22	3.66
II	22.06	33.85	22.06	13.38	8.65
III		44.45	22.22		33.33
IV	52.31	24.42	8.15	5.81	9.31
VIII	37.65	34.27	15.71	5.62	6.75
IX	50.76	24.09	8.91	5.76	10.48
X	58.27	15.33	3.49	1.16	21.75
XI	55.13	26.93	2.56		15.38
XII	52.31	20.85	7.81	5.95	13.08
XIV	62.03	17.92	3.95	1.21	14.89
XV	55.75	25.62	3.54	2.01	13.08
XVI	57.15	15.86	6.35	3.17	17.47
XVII	70.43	10.51	.68	1.02	17.36
XVIII	26.08	27.56	26.08	4.35	15.93
Total	50.83	22.04	8.65	4.41	14.07

Tables XXI and XXIa show that 13.06 per cent. of the yards were either encumbered with a good deal of rubbish or presented what might be considered a nuisance. Only one-half of the yards were entirely free from rubbish. The most serious conditions were found in the West Side Lower Levee and Flats, with considerable accumulation in the Upper Levee district and under the High Bridge. These conditions correspond very closely with the general condition of the houses in these districts mentioned.

Yard filled with rags.

Coupled with the problem of accumulation of rubbish is the problem of yard drainage. In this respect, as is apparent from Table XXIa, the yard drainage was such as to produce swampy conditions or stagnant pools in 17.65 per cent. of the yards on the West Side Lower Flats, and 33.33 per cent. on the West Side Upper Levee. These were perhaps the worst districts, and in most instances where there was a dump or swampy condition of the yard, was also to be found an accumulation of rubbish of more or less serious character. The inspection of the yards having been made long after the snow was off the ground, there was no justification of the conditions found on the ground of climatic difficulties. The photographs which we were able to take of existing conditions are sufficiently explicit as to the degree that the accumulation of rubbish might reach and need no further comment.

Lighting and Ventilation

The height and proximity of buildings, the orientation of streets, the location of windows, all are determining factors in the lighting and ventilation of rooms.

Small bedroom without window, occupied by three adults.

To have studied the possibilities of improving the lighting and ventilation of buildings from the point of view of possible improvements would have carried us too far afield. In a single instance, an attempt to meet the need for constructive suggestions was made in the case of a large tenement building now under the control of one of the most prominent real estate men of the city. It was found, however, that the building had originally been constructed with such faulty lighting and ventilation facilities that changes which would comply with a reasonable standard must exceed in cost what would ordinarily be expected to represent a fair relation between investment and return. The owners were therefore advised to abandon any plans for improving the lighting and ventilation of the building. The small proportion of the apartments rented render the building a decided liability to the owners. The destruction of this structure is bound to follow if the land upon which the building now stands is to produce the revenue which it is potentially capable of yielding.

While in many cases a cursory inspection of buildings suggests ways and means of improving the lighting and ventilation without unreasonable expenditures of money, we have for reasons of expediency confined our study to existing conditions alone.

Garbage chutes in air shaft.

Airshaft and court showing elevator, fire escapes and garbage chutes.

LIGHTING.

When we consider the lighting of the various rooms for which we obtained information, we find the following distribution:

Table XXII. Showing distribution of rooms according to lighting according to type of rooms.

One Family House.

			Light							
	Total		Good		Fair		Gloomy		Dark	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	802	100	723	90.15	36	4.49	40	4.99	3	.37
Dining	1,147	100	1,003	87.45	45	3.92	92	8.02	7	.61
Bed	4,210	100	3,588	85.22	218	5.18	371	8.82	33	.78
Kitchen	1,649	100	1,410	85.51	86	5.21	139	8.43	14	.85
Bath	776	100	587	75.66	24	3.09	98	12.63	67	8.62
Alcove	23	100	17	73.91	3	13.05	2	8.69	1	4.35
Hall	14	100	12	85.71			2	14.29		
Attic	6	100	2	33.33	3	50.00			1	16.67
Den	5	100	4	80.00			1	20.00		
Total	9,380	100	8,043	85.75	440	4.69	771	8.22	126	1.34

Table XXIIa. Two family house.

Two Family House.

			Light							
	Total		Good		Fair		Gloomy		Dark	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	653	100	591	90.51	19	2.91	42	6.43	1	.15
Dining	987	100	834	84.50	35	3.54	112	11.35	6	.61
Bed	2,530	100	2,061	81.47	109	4.30	338	13.36	22	.87
Kitchen	1,400	100	1,183	84,49	70	5.01	145	10.36	2	.14
Bath	905	100	685	72.38	25	2.76	117	12.93	108	11.93
Parlor	611	100	560	91.65	18	2.94	33	5.41		
Alcove	34	100	30	88.24	1	2.94	2	5.88	1	2.94
Hall	3	100	2	66.67	1	33.33				
Attic	7	100	5	71.45	2	28.55				
Den	3	100	3	100.00						
Total	7,133	100	5,924	83.07	280	3.92	789	11.05	140	1.96

Table XXIIb.

Tenement House.

			Light							
	Total		Good		Fair		Gloomy		Dark	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	530	100	465	87.74	18	3.39	43	8.12	4	.75
Dining	643	100	521	81.04	28	4.36	90	13.98	4	.62
Bed	1,830	100	1,415	77.33	80	4.37	265	14.48	70	3.82
Kitchen	1,033	100	791	76.55	64	6.19	164	15.91	14	1.35
Bath	672	100	312	46.44	21	3.12	132	19.64	207	30.80
Parlor	362	100	324	89.50	12	3.32	25	6.91	1	.27
Alcove	50	100	35	70.00			7	14.00	8	16.00
Hall	7	100	7	100.00						
Attic	4	100			1	25.00	3	75.00		
Den	3	100	2	66.67			1	33.33		
Total	5,134	100	3,872	75.41	224	4.36	730	14.22	308	6.01

It is clear from the above figures that of the 9,380 rooms in single dwellings, only 126 or 1.34 per cent were dark, the largest proportion of which were attic rooms, baths or alcove rooms. In the two family houses 140 or 1.96 per cent. of the rooms were found to be dark and in most instances these were also either attic or bath rooms. When, however, we consider the tenements or buildings occupied by three or more families, we find that there were 308 or 6.01 per cent dark rooms.

While on the whole the proportion of totally dark rooms used for habitation was comparatively limited, when we consider the rooms which were gloomy, which meant use of artificial light at least during part of the day, we find that out of a total of 21,647 rooms, 2,864, or 13.26 per cent. were gloomy or totally dark. This is especially to be regretted when we find that 9.6 per cent. of the bedrooms in single dwellings, 14.23 per cent. of the bedrooms in two family houses and 18.3 per cent. of the bedrooms in tenements were either gloomy or dark. It is clear that the tenements are less well provided with lighting facilities and that the bedrooms in this type of dwellings are more frequently without sufficient lighting than either the one or two family houses.

Dark room used for habitation and storage—back of store.

The kitchens, which are so often used for sitting room and bedroom purposes, were also found to be poorly lighted in a considerable proportion of the cases. Gloomy and dark kitchens constituted 9.28 per cent., 10.5 per cent. and 17.26 per cent. in single dwellings, two family dwellings and tenements respectively. As the major part of the family activities are frequently carried on in the kitchen, particularly during the cold winter months, it is keenly to be regretted that more than one sixth of the kitchens in tenement houses should be either gloomy or totally dark.

Looking up an air shaft which provides light and ventilation for 32 rooms.

It is generally agreed, and many cities have translated the agreement into law, that bath rooms and toilets need the same lighting facilities per unit of floor space as any other rooms. It is surprising, therefore, to find that 21.25 per cent., 24.86 per cent. and 50.44 per cent. of the baths in the single dwellings, two family dwellings and tenements respectively, were either gloomy or dark. The tenement bath rooms, like all other types of rooms being lighted inadequately in more than one half of the cases.

VENTILATION.

Where lighting is poor, ventilation is likely to be poor. Narrow shafts and such conditions as are revealed by the air wells provided in the old tenement houses shown by our photographs, not alone fail to provide fresh air, but present conditions which befoul the air that already is enclosed by the buildings.

The following Tables show the distribution of rooms according to the condition of ventilation:

Table XXIII. Showing distribution of rooms according to the condition of ventilation.

One Family Houses.

	One Family House.				Ventilation.					
	Total		Good		Fair		Bad		None	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	802	100	686	85.52	78	9.74	38	4.74		
Dining	1,147	100	989	86.24	114	9.94	43	3.74	1	.08
Bed	4,210	100	3,385	80.43	517	12.27	305	7.23	3	.07
Kitchen	1,649	100	1,351	81.94	183	11.10	115	6.96		
Bath	776	100	604	77.83	50	6.45	69	8.89	53	6.83
Parlor	748	100	657	87.83	68	9.09	23	3.08		
Alcove	23	100	18	78.25	4	17.40	1	4.35		
Hall	14	100	14	100.00						
Attic	6	100	2	33.33	3	50.00	1	16.67		
Den	5	100	4	80.00	1	20.00				
Total	9,380	100	7,710	82.21	1,018	10.84	595	6.34	57	.61

Table XXIIIa. Two Family Houses.

	Two Family House.				Ventilation.					
	Total		Good		Fair		Bad		None	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	653	100	543	83.18	79	12.09	30	4.50	1	.15
Dining	987	100	836	84.71	105	10.63	45	4.56	1	.10
Bed	2,530	100	1,973	77.97	384	15.17	168	6.67	5	.19
Kitchen	1,400	100	1,102	78.72	208	14.86	88	6.28	2	.14
Bath	905	100	672	74.24	64	7.07	101	11.17	68	7.52
Parlor	611	100	527	86.27	50	8.17	34	5.56		
Alcove	34	100	26	76.49	7	20.57	1	2.94		
Hall	3	100	2	66.67	1	33.33				
Attic	7	100	3	42.86	3	42.86	1	14.28		
Den	3	100	2	66.67	1	33.33				
Total	7,133	100	5,686	79.74	902	12.61	468	6.57	77	1.08

Table XXIIIb. Three Family Houses.

	Tenement Houses.				Ventilation.					
	Total		Good		Fair		Bad		None	
Rooms	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Living	530	100	419	79.06	76	14.35	27	5.08	8	1.51
Dining	643	100	507	78.86	78	12.13	53	8.24	5	.77
Bed	1,830	100	1,311	71.64	271	14.81	228	12.46	20	1.09
Kitchen	1,033	100	748	72.43	176	17.03	104	10.06	5	.48
Bath	672	100	322	47.93	55	8.18	144	21.41	151	22.48
Parlor	362	100	309	85.37	31	8.56	22	6.07		
Alcove	50	100	38	76.00	6	12.00	6	12.00		
Hall	7	100	7	100.00						
Attic	4	100			3	75.00	1	25.00		
Den	3	100	3	100.00						
Total	5,134	100	3,661	71.42	699	13.61	585	11.40	189	3.67

The above Tables show a total of 21,647 rooms with 1,971, or 9.09 per cent. either without ventilation or badly ventilated. It must be remembered in this connection that in appraising the ventilation, account was taken only of the possibilities for ventilation, and not of the actual use of such possibilities. That many of the tenants were not availing themselves of the ventilating facilities was frequently apparent, but as our concern was mainly with structural defects, the use of ventilation was not taken into account.

Typical rear view of old type of single dwellings. Note proximity of buildings.

The ventilation of rooms in single dwellings was everywhere more amply provided for than in either two family or tenement dwellings, the proportion of rooms without ventilation being 0.61 per cent., 1.08 per cent. and 3.67 per cent. in single, two family and tenement dwellings respectively. The proportion is still more striking when we consider rooms with bad ventilating facilities, as we find 6.34 per cent., 6.57 per cent. and 11.40 per cent. of the rooms with bad ventilating provisions in the one family, two family and tenement dwellings. Throughout, it was found that the bath-rooms were less adequately provided with possibilities for ventilation than any other rooms, and this was especially true of the bath rooms located in tenement buildings, where it was found that 43.89 per cent. were either entirely without ventilation or badly provided with means for ventilation.

Milk bottling establishment in filthy cellar.

The 68 bath rooms without ventilation were mainly located in large buildings where sky lights were sometimes provided, but often these bath rooms were merely closets in which a bath tub had been built subsequent to the construction of the buildings. That these tubs were seldom used was evident.

That coal, potatoes or vegetables were some times stored in these tubs must be admitted, but these tubs were of no other practical use, especially as in 39 of the cases no hot water could be obtained unless it was carried from the kitchen into the bath room, which was invariably without means of heating.

To find airshaft ventilation of the worst type was unexpected in so small a city as St. Paul, but while this condition was limited as to numbers it was nevertheless repre-

sentative of what does take place when inadequate legislative control prevails.

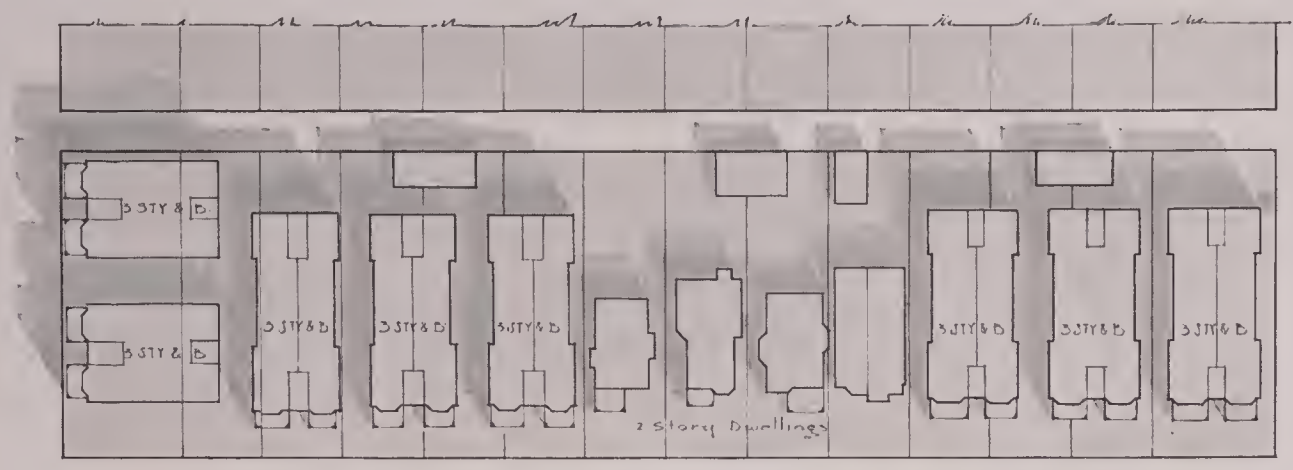
Shack occupied by family with 10 children.

Within recent years various types of tenements and so called apartment houses have been built in the City of St. Paul. It is unfortunate that the Building Department of the City does not publish any data relating to the types of buildings constructed every year. A casual inspection, however, shows that the three and four story tenement is becoming increasingly a menace to the community, the difference between the tenement, as generally understood, and the apartment, being mainly in the kinds of doors, woodwork, wall paper, lighting fixtures, etc. In so far as lighting and ventilation are concerned, the difference seems to be very slight.

SPECIAL LIGHTING STUDY.

In order to convey some conception of the extent of the problem of lighting in the common type of three story tenement house in relation to adjoining buildings, we have selected two typical blocks of buildings, one between St. Albans and Dale Sts. on Grand Ave., and the other between Summit and Farrington on Selby and Dayton Aves. It will be noted that all rooms on the inside of the lot and in the rear of the lot do not get direct sunshine at 11 o'clock in the morning, which is the time of the maximum sunshine possible on the streets considered. The apartments shown in the half tones have the smallest exposure to direct sunshine, where the proximity of the building is such as to interfere with direct sunlight on the side of the buildings. The two story buildings also are deprived of proper lighting and the desirable effects of the rays of the sun. That the lots are entirely too deep for proper lighting and ventilation can be readily seen by a glance at the half tone on page 48. This difficulty is further emphasized on the north side of the block, which is never affected by direct sunshine because of the too great occupancy of the lot area, as illustrated by the block of buildings on Dayton Ave. Such construction should be entirely prohibited if the present investment in so called apartments is not to become the foundation upon which new city slums are to find their being. New York's experience in land sweating should lead to far sighted protection of investors against building enterprises, the rate of deterioration of which is so rapid as to impair the safety of the original investment and the whole housing standard of the City of St. Paul. The buildings shown in the half tones are not cheaper because they are crowded upon small lots. The cost of material and labor is the same, the cost of maintenance is the same or greater, and the rate of depreciation more rapid. The only economy is in the land. This economy does not represent a fixed value except as we permit, or do not permit, crowding and land sweating. Land values increase in proportion as crowding increases. The land sweater in one section of the city courts the double offense

ST. ALBANS ST.



DALE ST.

GRAND AVE.

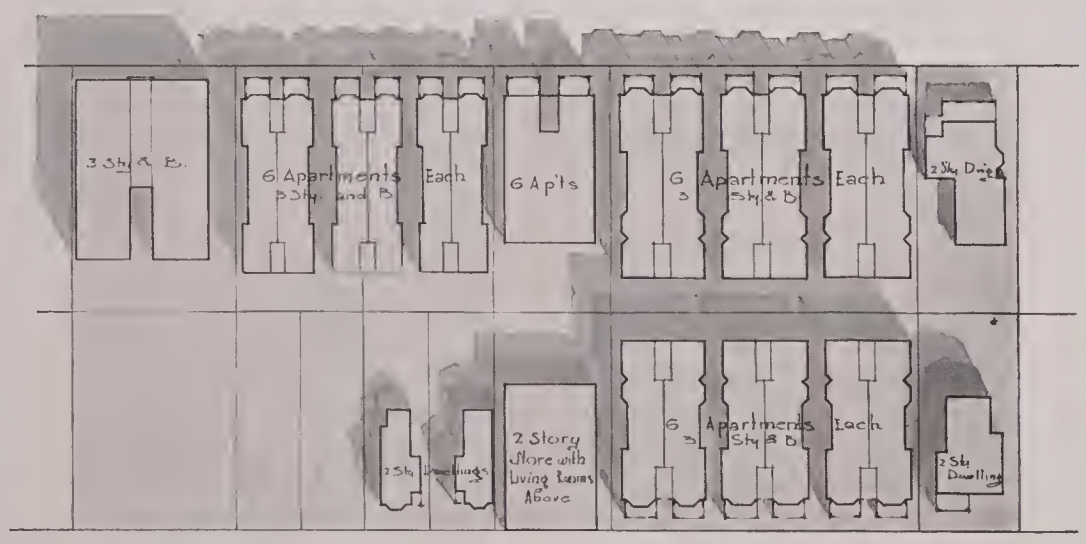
SUNLIGHT AS RELATED TO HEIGHT OF BUILDINGS

GROUP OF APARTMENT HOUSES
SHOWING SHADOWS CAST AT 11:00 A.M.
ON SHORTEST AND LONGEST DAYS.

№ 1

STUDIES BY A.S.DEVOR ARCHITECT ST. PAUL

DAYTON AVE.



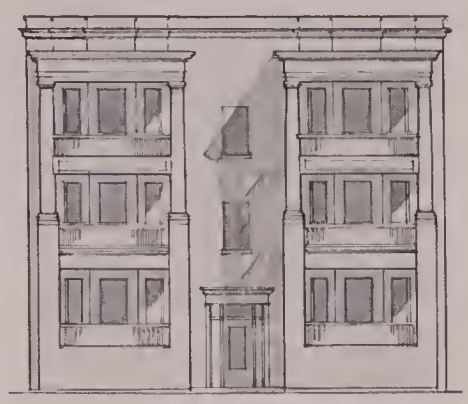
SELBY AVE.

SUNLIGHT AS RELATED TO HEIGHT OF BUILDINGS

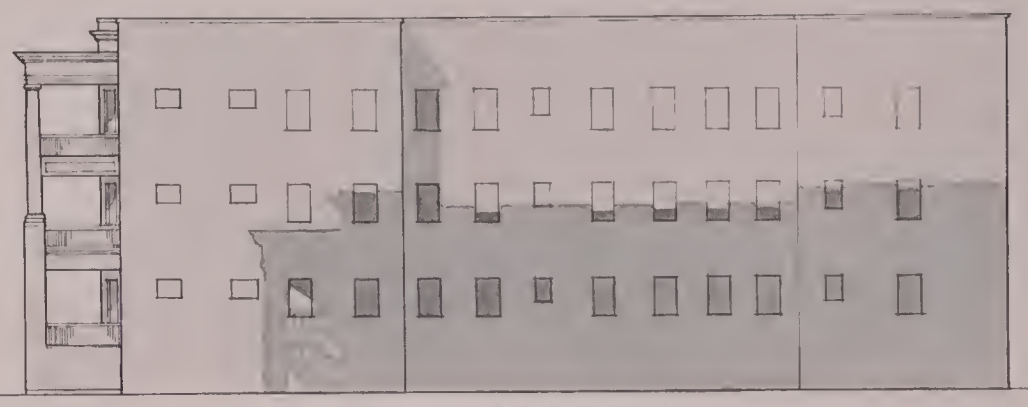
GROUP OF APARTMENT HOUSES
SHOWING SHADOWS CAST AT 11:00 A.M.
ON SHORTEST AND LONGEST DAYS.

№ 2

STUDIES BY A.S.DEVOR ARCHITECT ST. PAUL



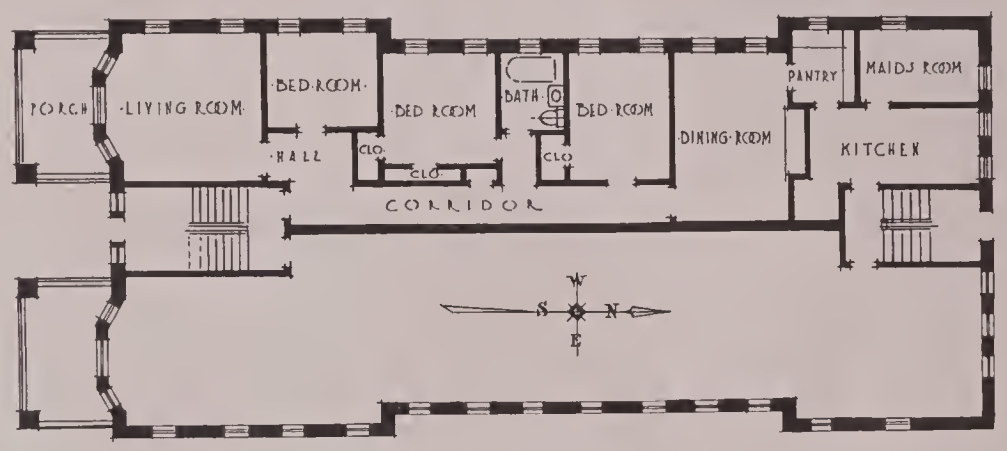
·FRONT·ELEVATION·



·SIDE·ELEVATION·

SUNLIGHT
AS RELATED TO
HEIGHT OF BUILDINGS

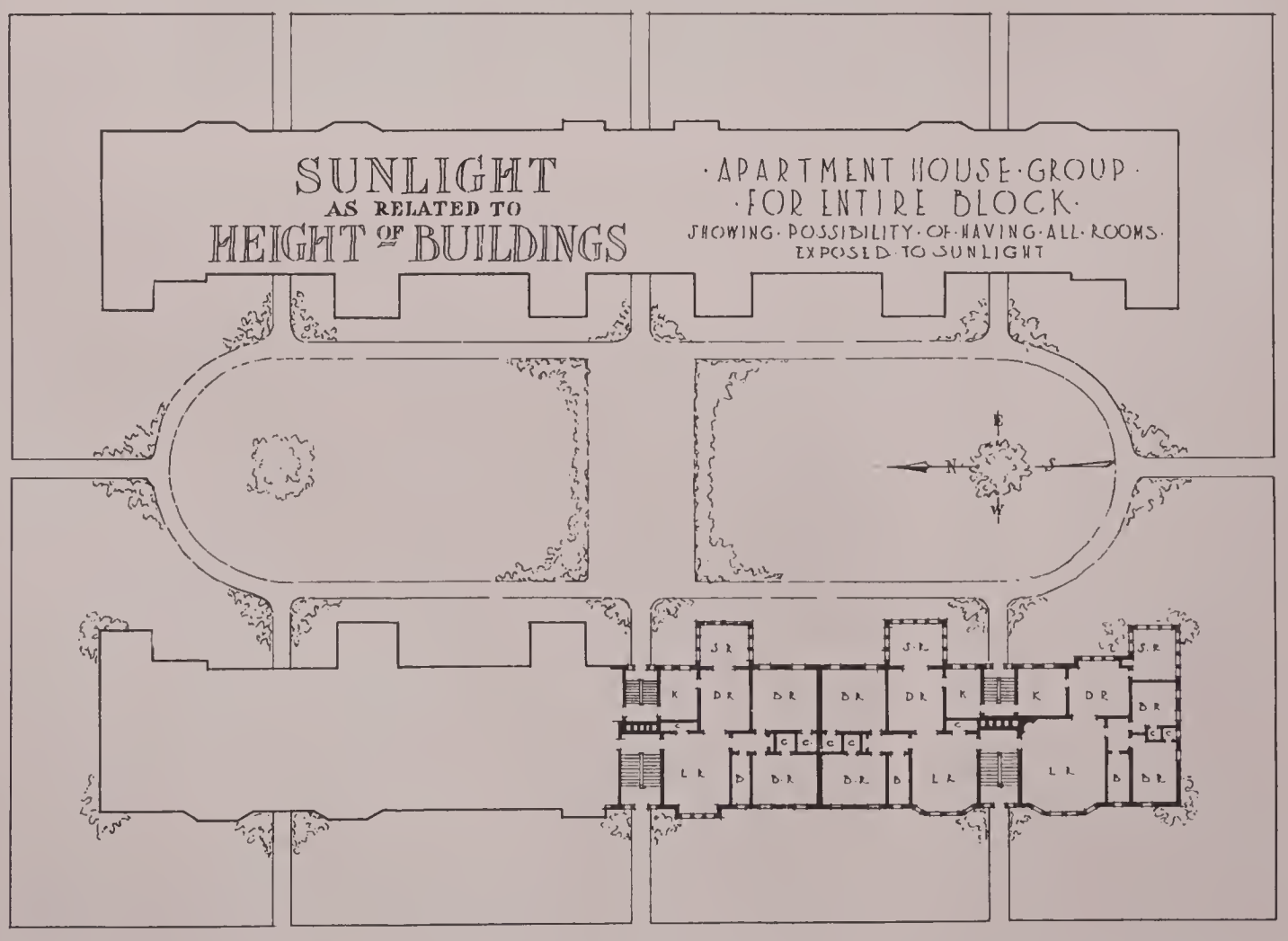
·ELEVATIONS·AND·PLAN OF·
·TYPICAL·THREE·STORY·
·APARTMENT·BUILDING·
·SHOWING·SHADOWS·CAST·AT·MOST·
·FAVORABLE·HOUR·(ABOUT 11:00 A.M.)
·AVERAGE·BETWEEN·SHORT·AND·LONG·DAY·



·TYPICAL·FLOOR·PLAN·

·STUDIES·BY·A·S·DEVOR·ARCHITECT·ST PAUL·

·STREET·



A·S DEVOR ARCHITECT· ST PAUL·

of lowering standards of buildings occupying his own property, and in depriving other land owners of the legitimate market for their property. Proper distribution of building only distributes values over a large area in proportion as we distribute sunshine and air. Tenements and land sweating concentrate values as we reduce the sunshine and air in our homes.

Typical new type of cheap tenement construction.

The Lodger Problem

In all housing reform the problems of congestion have been nowhere more acute and more difficult to control than where the lodger evil has come to interfere with the privacy and comfort of the family. This is sometimes due to a desire on the part of the families to meet monthly rentals, but the main reasons for the lodger evil are to be found in the gregarious habits of the foreign elements, and the failure on the part of our cities to provide adequate and reasonably cheap housing accommodations for the unmarried workers and those who have no family connection in the community in which they are working.

Whatever may be said about other communities, the failure to provide housing accommodations for persons without family connection in the community is one of the most neglected aspects of the local problem, both in point of actual provisions and from the point of view of legislative and administrative control. In the latter part of this study we shall discuss more in detail the existing problem of the hotel and rooming house in this city.

Let us consider for a moment the problem of the lodger in the homes which we have been able to study in the course of this investigation. The following table shows the number of families with and without lodgers according to ownership of homes found in the single dwellings and in the apartments.

Table XXIV. Showing distribution of single and multiple dwellings according to ownership and proportion of families with lodgers:

Type Dw'lling	Renters No Lodgers	Renters Lodgers	Owners No Lodgers	Owners Lodgers	Total No L'dg'rs	Total L'dg'rs
Single	743	278	699	174	1,442	452
Multiple	395	297	320	61	1,715	358
Total	2,138	575	1,019	235	3,157	810

Type Dw'lling	Renters No Lodgers	Renters Lodgers	Owners No Lodgers	Owners Lodgers	Total No L'dg'rs	Total L'dg'rs
Single	72.77	27.23	80.07	19.93	76.14	23.86
Multiple	82.45	17.55	83.99	16.01	83.01	16.99
Total	78.81	21.19	81.26	18.74	79.58	20.42

This table shows that there is a greater frequency of lodgers among the families living in rented houses than among owners, the former having lodgers in 21.19 per cent. of the cases as compared with only 18.74 per cent. among the home owning families. It is evident however, that the difference is of no great importance. The most interesting fact, however, shown by these figures is the greater frequency of families keeping lodgers in rented homes in single dwellings, as compared with the frequency of families keeping lodgers in families renting apartments in multiple dwellings. It is also evident that the owners of multiple dwellings and occupying an apartment in such dwelling are less likely to keep lodgers than if they were owners and occupants of single dwellings.

Basement room occupied by old lady living alone.

This condition, while in a sense favorable to the multiple dwelling, merely indicates that it is less convenient to keep lodgers in multiple dwellings, both because of the limited floor space and because of the difficulty to utilize rooms not intended for bedrooms, for lodging purposes.

This fact is more clearly proven when we remember that in an earlier part of this report it was shown that the bedroom occupancy, not to say congestion, was greater in the apartments located in multiple dwellings than in single dwellings, despite the fact that there is a greater frequency of families with lodgers in the latter group of dwellings.

NATIONALITY AND THE LODGER PROBLEM.

Table XXV. The relation between nationality and the practice of keeping lodgers has frequently been pointed out in various housing surveys that have been made within recent years in this country. To test the extent of the relationship between these two factors in the houses investigated in the City of Saint Paul the following table was prepared from the data available:

Nationality	Renters				Owners				Families With Lodgers		Renters Families		Owners Families	
	Families Only		Families With Lodgers		Families Only									
	No.	Per Ct.	No.	Per Ct.	No.	Per Ct.	No.	Per Ct.			Families Only	With Lodgers	Famliies Only	With Lodgers
Americans	317	78.58	93	68.39	86	21.42	43	31.61	77.25	22.75	66.65	33.35		
Germans	244	61.80	40	56.45	151	38.20	31	43.55	85.9	14.1	82.95	17.05		
Scandinavian	240	69.77	74	73.27	105	30.23	27	26.73	76.45	23.55	79.55	20.45		
Jews	156	56.62	46	56.09	119	43.38	36	43.91	77.22	22.78	76.75	23.25		
Irish	130	73.91	21	72.48	46	26.09	8	27.52	86.18	13.82	85.19	14.81		
Italians	92	57.02	43	60.56	69	42.98	28	39.44	68.15	31.85	71.15	28.85		
Negro	64	85.29	32	78.04	11	14.71	9	21.96	66.65	33.35	55.00	45.00		
French	55	83.32	27	74.96	11	16.68	9	25.04	67.05	32.95	55.00	45.00		
Russian	49	71.01	24	72.73	20	28.99	9	27.27	67.14	32.86	68.99	31.01		
Poles	44	64.74	19	79.16	24	35.26	5	20.84	69.9	30.1	82.76	17.24		
English	34	87.26	7	87.50	5	12.74	1	12.50	82.9	17.1	83.34	16.66		
Syrians	25	73.48	4	80.00	9	26.52	1	20.00	86.21	13.79	90.00	10.00		
Bohemians	21	42.00			29	58.00			100.00		100.00			
Roumanians	17	68.00	12	80.01	8	32.00	3	19.99	58.65	41.35	72.75	27.25		
Hungarians	16	69.00			7	31.00			100.00		100.00			
Scotch	15	79.95	3	100.00	4	20.05			83.32	16.68	100.00			
Mixed	401	71.52	141	75.04	159	28.48	47	24.96	73.98	26.02	77.19	22.81		
Total	1,920	69.92	586	71.53	863	30.08	257	28.47	76.65	23.35	77.08	22.92		

This table is in most striking contrast to the ordinary conception of the lodger evil in relation to racial and national groups. Considering the families occupying rented homes, we find that 586 families out of 2,506 families or 23.35 per cent keep lodgers. This proportion is only slightly above the proportion of families with lodgers classed as American, the latter having a proportion of 22.75 per cent families with lodgers. The largest proportion of families with lodgers was found among the Hungarians who occupy rented dwellings, and the smallest proportion of such families was found amoung the Irish tenants. In the case of the Hungarians, however, the figures do not have any potent significance because of the very limited number of families of this national group, while in the case of the Irish, the figures are sufficiently large to indicate the trend of the general distribution of lodgers in such families.

The other national and racial groups which stand out in relation to the frequency of keeping lodgers are the Negroes, French, Russians, Italians and Poles in the order of their importance. In all these groups the families kept lodgers in more than 30 per cent of the cases.

When we consider the distribution of lodgers in the families owning their homes we find that the American families stand out as keeping lodgers in 33.35 per cent of the cases as compared with only 22.92 per cent of foreign families owning their own homes and keeping lodgers. With the exception of the Negro and French families, the American families owning their homes seem to show a greater frequency of lodgers than any of the other national and racial groups. The problem of the negro in securing adequate housing accommodations leads to crowding and no doubt adds to the lodger evil.

On the whole, evidence that we have gathered in the course of this inquiry shows that the lodger evil is far from representing the acute problem that we ordinarily find in the eastern cities, but as we shall point out later the transient character of the lodger population in St. Paul, and the failure on the part of the City or business interests to meet the local need for accommodating the floating labor has created a rooming house and hotel problem that is as serious as any that can be found in the congested areas of the eastern industrial centers.

SIZE OF FAMILY AND LODGERS.

It is generally conceded that lodgers add to the congestion of the home and interfere with the privacy of its members. The following table gives some conception of the relationship between the size of the family and the number of lodgers.

Table XXVI. Showing the number and proportion of lodgers according to the size of the family:

No. Lodgers / Size of Families	1	2	3	4	5	6	7	8	9	10	11	12	13	15	17	Totals	Per Ct.
1	24	31	11	6	2	3	2	1	2	2			1			244	10.81
2	113	50	16	16	8	5	5	2	3	2	2	1	1			540	23.96
3	99	56	23	7	3	7	2	3	2	2	2	1				481	21.30
4	97	44	23	9	5	4	4	3		1	1	1		2		454	20.15
5	61	28	14	7	1	3	1	1			1	1				248	10.89
6	29	17	8	7		2	1	1		1					1	169	7.49
7	24	7	1	2	1	1										60	2.66
8	12	2	6	1												38	1.68
9	7				2											17	.75
10																2	.09
11					1											5	.22
Total	486	235	102	55	23	25	15	11	7	8	6	4	2	2	1	2,258*	100.00

*Thirty-five lodgers in families size of which was not ascertained accurately.

Table XXVI shows that lodgers are most common in families with few children or at least that 55.98 per cent of the lodgers lived in families of three persons only, and that if we add the families with four persons who also keep lodgers, they accommodate 76.11 per cent of the total number of lodgers found in the course of this survey. The keeping of lodgers in large families is evidently not popular, and in all probability this lack of popularity of lodgers in large families is due as much to the families as to the lodgers who prefer to live in small families.

Whatever the direct cause of the practice of keeping lodgers in families may be, it would seem that the size of the family with its economic problem of food and payment of rent, which are the essentials of all expenditures in wage earning families, have no very telling effect upon the frequency of lodgers in such families.

In order to ascertain the influence that the keeping of lodgers may have upon the rental rates in various districts in dwellings of different sizes, whether they be in single or multiple dwellings, the following tables were prepared from the available data:

Table XXVII. Showing distribution of rents according to type of dwelling and district on basis of distribution of families with or without lodgers:

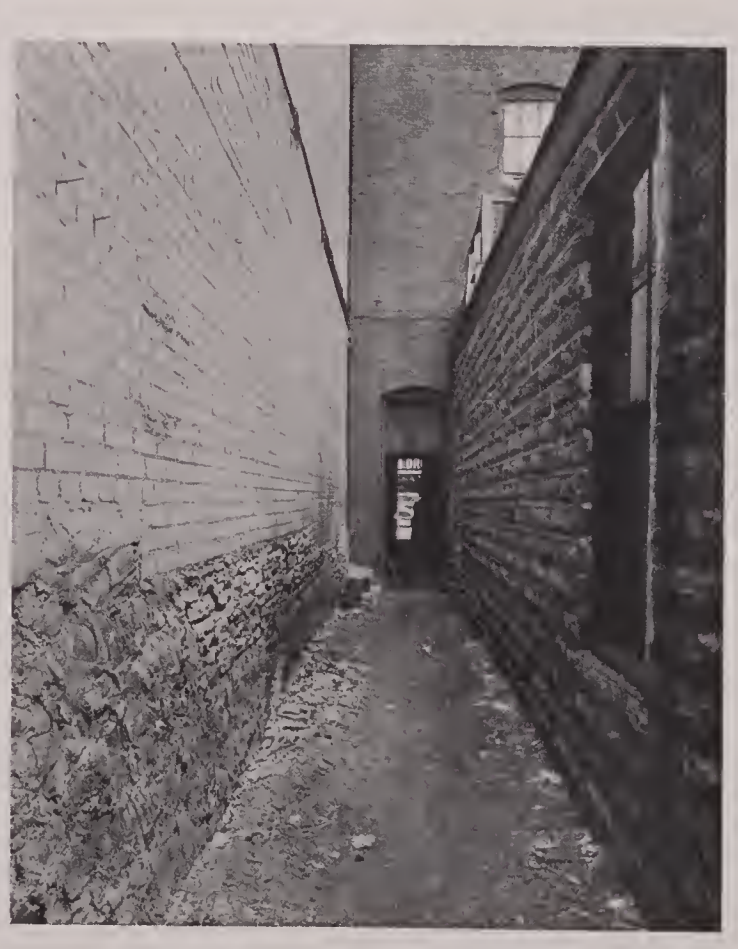
		Apartments		Houses	
		Family Only	Families With Lodgers	Family Only	Families With Lodgers
District	I	1.78	1.44	2.56	1.63
District	II	2.68	2.91	2.05	1.76
District	III	.48	.44	1.90	1.43
District	IV	2.17	2.30	2.32	2.38
District	VIII	4.40	3.49	3.87	4.54
District	IX	3.39	2.26	2.59	1.30
District	X	3.00	2.58	2.48	2.61
District	XI	2.35		.72	.78
District	XII	3.06	3.08	2.89	2.97
District	XIV	2.52	2.50	2.01	1.60
District	XV	2.72	2.42	2.52	2.47
District	XVI	3.45	3.25	3.05	3.04
District	XVII	2.74	3.71	3.21	2.98
District	XVIII	1.61	1.19	1.07	1.00

Table XXVIIa. Showing distribution of rents according to size of dwelling on basis of distribution of families with or without lodgers:

	Apartments		Houses	
No. of Rooms	Family Only	Families With Lodgers	Family Only	Families With Lodgers
2	2.73	3.27	5.50	1.00
3	3.57	2.69	3.87	2.51
4	2.83	2.85	2.65	1.78
5	2.80	2.62	2.67	2.55
6	2.84	2.90	2.63	2.79
7	2.25	1.93	2.18	2.90
8	4.38	2.95	2.25	2.72
9	2.22	3.00	2.42	3.13
10	2.50			2.86
11			2.55	2.69
12	1.67		.71	1.67
13	.38		.77	2.57
14				2.14
15				
16				
17				
18				
19				
20				2.00

In the above tables the classification was based on per room rental in order to facilitate comparison between the various sizes of dwellings and to make the comparison by districts more easily perceptible. These figures, of course, eliminate all homes owned by the occupants as it would not have been safe to make estimates of rentals.

When we consider the figures in Table XXVII we find that the distribution of rental rates varies considerably with the location of the districts. The Eighth District, which is by no means one of the best, shows the highest rentals. This district is not only congested, but from the point of view of sanitary facilities it is one of the worst. The new changes in the railroad trackage will do away with a good share of this district. Districts Twelve, Sixteen and Seventeen, which also represent high rental rate, are, as will be seen from the map on page 10, not among the best districts, and yet the rentals are quite high. The most surprising fact, however, is the lack of any clearly definable relationship between the frequency of the practice of keep-



Egress for 75 persons. Hall obstructed.

ing lodgers and rentals per room. That there is some relation between the type of district and the number of lodgers in such districts is evident from the following table:

Table XXVIII. Showing the distribution of lodgers according to districts:

		Lodgers	
		No.	Per Cent
District	I	102	4.45
District	II	212	9.26
District	III	30	1.31
District	IV	73	3.18
District	VIII	702	30.59
District	IX	215	9.37
District	X	323	14.09
District	XI	49	2.14
District	XII	281	12.26
District	XIV	80	3.48
District	XV	70	3.06
District	XVI	77	3.36
District	XVII	51	2.23
District	XVIII	28	1.22
Total		2,293	100.00

These figures show that the larger number of lodgers was found in the district that is about to be demolished by the railroad, and that the Ninth and Tenth districts are also affected by lodgers. All three of these districts are among the worst in this City, while the First, Second and Twelfth are made up of homes owned and occupied by squatters or are generally in bad condition.

This close relationship between the character of the neighborhood and the number of lodgers is, of course, significant, and observation has shown that many of the homes where lodgers are kept are generally in bad condition of repair aside from being located in deteriorated neighborhoods.

The proximity of these districts to the railroads, shows the need for better accommodations of railroad employees, a need which has been definitely recognized by the railroads but which they have failed to meet except in one or two instances. These provisions are wholly inadequate, and in at least one case, not better than some of the worst of the lodging houses of the City, as is shown by photographs embodied in this report.

Box-car sleeping quarters.

The large number of homes in which lodgers are kept, and the large number of lodgers who are housed in the area about to be torn down by the railroads, raises another problem of housing which in some way should be met if the present conditions of more or less normal room occupancy is not to degenerate into a very serious problem of congestion. When the properties occupied at the present time by families and lodgers are torn down, these families will have to seek other places of habitation. While there are in some sections many homes that are standing idle, there is no doubt that the families in the area to be removed will move to the nearest sections and will take no steps to change their place of residence beyond a limited area in the vicinity of their present habitation.

How to meet this situation will be pointed out at the end of this report. That a machinery for locating families is necessary can hardly be doubted, especially if we consider the fact that there is no very material difference in the rental rates in good and poor homes, in so far as repair is concerned, and that there is a very large proportion of homes that are at present unoccupied.

The Lodging, Rooming Houses and Hotels

GENERAL CONSIDERATIONS.

It has been pointed out in the section on "The Lodger Problem" that the extent of the practice of keeping lodgers does not present a very serious evil in the City of St. Paul. If, however, the problem is not serious in the private homes where lodgers are kept, conditions found in the rooming and lodging houses, ninety of which were covered in the course of this inquiry, revealed a local situation which in lack of sanitary and safety facilities can hardly be surpassed by any other city in the United States.

As the investigation progressed, various aspects of the problem came to light, but the limitation of time and the feeling that such problems as prostitution and illegal liquor traffic were rather removed from housing as it is ordinarily understood, these phases have not been taken under consideration. That the character of some of the rooming houses and hotels studied was such as to unfit them for other than illicit use was quite evident.

Rooming house shack in Midway district.

Some conception of the extent of the investigation of rooming houses and hotels may be gained from the following table:

Table XXIX. Showing lodging houses investigated according to number of rooms and total rooms.

Number of Rooms	Total Number each Size of Hotel	Total Number Rooms
6-10	10	91
11-20	33	566
21-30	16	480
31 and over	31	1432
Total	90	2569

Ninety hotels and rooming houses selected from the 150 hotels and licensed rooming houses in the city represent 60 per cent. of the total. In our study we made an effort to include all types of establishments in order to show the extent of the present inefficiency of the inspection system, which is no doubt due to inadequate appropriation and the recent changes in the organization of the Hotel Inspection Department as a part of the Department of Oil Inspection. Forty seven of the establishments examined contained more than twenty rooms and the total of such establishments contained 19120, or 74.42 per cent. of all the rooms examined. In other words, whatever conditions were found related mainly to large establishments. What the existing conditions were we shall point out shortly, but before we enter upon a discussion of conditions we must say a word about the prices charged. This is made necessary by the frequent statement in defense of the poor condition in hotels and rooming houses that there must be some place for the men and women who cannot pay more than five or ten cents a night. That such a place may be necessary is not to be doubted, but whether the strikingly poor conditions that exist are due to low rates needs corroborative evidence.

In order to present in detail the classification of rates according to sizes of establishments and classification of rooms the following table was compiled from the original records made in the field. Unoccupied and dormitory rooms were excluded.

Table XXX. Showing classification of establishments studied according to size of establishment, rates and location of rooms in relation to lighting:

Size of Lodging House	Total No. Rented Rooms Outside	Inside	Cost Per Room Per Night 15c Out.	In.	20c Out.	In.	25c Out.	In.	30c Out.	In.	35c Out.	In.	40c Out.	In.
6-10 Rooms	65	8	2				17	3		1	7	2		
11-20 Rooms	382	123					22	13	5		26	8	41	3
21-30 Rooms	332	117					2	23	4		15	13	19	2
Over 30 Rms.	978	398	32	6	26	61	8	79	34	23	81	27	47	7
Total	1,757	646	34	6	26	61	49	118	43	24	129	50	107	12

*2 of which are INSIDE RMS. †9 of which are INSIDE RMS.

Size of Lodging House	50c Out.	In.	60c Out.	In.	75c Out.	In.	$1.00 Out.	In.	$1.50 Out.	In.	$2.00 Out.	In.	$3.00 Out.	In.
6-10 Rooms	15	2	1		5		10							
11-20 Rooms	61	62	14	2	49	20	92	10	35		4		4	3
21-30 Rooms	18	49	19		46	17	130	12	1	1	2			
Over 30Rooms	119	123	53	2	92	29	263	25	48	4	17	3	5	
Total	213	236	87	4	192	66	495	47	84	5	23	3	9	3

Perhaps the most interesting fact revealed by this table is the large proportion of inside rooms which totaled 646 or 26.88 per cent. of all the single rooms examined. This astonishingly large proportion of inside rooms was located in most instances so that artificial lighting only was possible. The ventilation, as will be shown later, was also difficult or impossible.

When we consider the rates charged for these rooms we find that out of a total of 1491 outside rooms only 109, or 6.35 per cent. were rented at rates of 25 cents or less, and that there were no rooms renting for 10 cents per night. In the case of the inside rooms it was found that those renting for 25 cents per night or less amounted to 185 out of a total of 635 inside rooms, or 29.13 per cent. These proportions would seem to indicate that the cheap rooms are mostly inside rooms, quite undesirable and as we shall see from later discussion, in many cases quite unfit for occupancy. The largest proportion of the rooms in these second and third rate hotels and rooming houses were of the type renting for between 30 and 50 cents per night. In this group we found 50.68 per cent. of the inside rooms and 32.95 per cent. of the outside rooms. These figures do not seem to warrant the argument that the cheap lodging house and hotel with its disproportionate number of inside rooms is run for the benefit of the poor who can not afford to pay more than 10 cents per night. If such a need does exist it is clear from the above figures that it is not being met.

Perhaps the worst conditions were found in the dormitory rooms of which twenty in all were examined. In these twenty dormitory rooms, of which 3 were inside dark rooms, 223 beds were found, and of this number of beds 149 rented at 15 cents per night, the balance renting at from 20 to 50 cents per night. The condition of the beds and bedding in some of these dormitories is a menace to the health of the occupants, and some of our photographs, altho faithful to the conditions, fail to

reveal the true conditions of ventilation, lighting and cleanliness, or rather the lack of all of these.

Shack converted into hotel in Midway district.

As it was stated at the beginning of this chapter, it is not our intention to deal in this report with the liquor problem or the problems of immorality. A close study of the conditions, however, reveals the fact that a conservative estimate of 50 per cent. of the hotels and rooming houses in the City of St. Paul derive either one-half or the whole of their income from illegal liquor selling and from the traffic of prostitution carried on either directly by the owners or managers, or simply by renting rooms to street walkers who utilize them for immoral purposes.

An analysis of the physical conditions of the buildings shows a remarkable fire hazard which is easily controllable under the State laws, an unusual amount of neglect to control sanitary conditions which are under the jurisdiction of the State Hotel Inspector, and general health conditions which could easily be controlled by the Health Department of the City of St. Paul.

While the statistical data presented in this report gives some impression of the conditions that exist, the field notes made in the course of the investigation are perhaps more valuable in presenting a diagnosis of the situation than the statistics which we have been able to gather. It is for this reason that some of the field notes have been copied in their original form with such abbreviations as seemed immaterial in presenting an accurate picture of the conditions. It should be remembered that these statements in many instances have been verified and police records examined. Any one personally interested in ascertaining the hotels to which reference is made in the following notes can obtain such information through the Real Estate Board of the St. Paul Association or through the Wilder Charity.

NOTES TAKEN ON LODGING HOUSES AND HOTELS

"————, —— E. 7th St.

Ten dark inside rooms out of a total of eighteen rooms.

————, —— E. 7th St.

When we came to proprietor's kitchen, found four girls—not in street attire. Notice scale prices; $1.00 is charged for an inside room and $1.50 for one little better than an inside room.

————, —— Jackson St.

No fire escapes on third floor, wooden steps down to ground from second floor, rear. Roof is old and leaks. Proprietress called investigator "DEAR" in answering questions. No sitting or recreation rooms.

————, —— E. 7th St.

This woman—who looks like a sport—says she is continuing the place "temporarily." That the owners asked her to keep it until "changes are made." It may be she has been raided by the police. She has a "Furnished Rooms" sign in the window, the place looks decidedly suspicious and she reluctantly let investigator look things over.

————————, —— E. 5th St.

Place was raided some months ago as a disorderly house. No sitting room.

————————, —— St. Peter St.

Disorderly place. She may have 3 roomers by the week, but all other rooms are evidently rented over and over again to transient couples off the street.

————————, —— S. Wabasha St.

For bed-bug conditions this place is one of the worst. Proprietor frankly says building should be condemned. It is an old-time wooden structure, without fire escapes. In the yard is a long wooden stable which adds greatly to the fire hazard. Proprietor says he would not sleep in the rooms himself because of the bugs.

————————, —— W. Exchange St.

Notwithstanding this is a wooden structure 3 stories, all the fire escapes there are is an iron ladder in the rear. Wife of proprietor says owner positively will not make needed repairs, and frankly says the building should be condemned so as to force owner to act.

————————, —— St. Peter St.

Three prostitutes appeared from as many rooms, evidently looking for trade. When proprietor showed investigator around later, she deftly omitted showing these rooms from which the women emerged.

————————, —— W. 7th St.

This place is in an old, falling-into-decay building where there is considerable fire hazard—yet no fire escapes.

————————, —— Exchange St.

This place has had an unsavory reputation in the past as being rooming place of so-called "high-class" sporting women and kept women.

————————, —— Wabasha St.

Proprietor is a fat, coarse, talking and acting woman, going around in a kimona. Her manners are those of a "Madam." Regarding extra dark, miserably ventilated inside rooms on third floor, chambermaid explained: "Oh, these rooms are all right if the girls wants to stay in here a little while." There are four inside rooms not fit for use as sleeping

Steep stairway in down town hotel.

rooms. Back yard is extra dreary and dirty. She has no definite business standards—for instance—a rear room 8x10 with single bed is placed at $1.50. This to investigator is conclusive proof that she is not running a legitimate hotel. The only fire escapes are wooden stairs in rear —not adequate. Paper and rubbish has been thrown out back of a restaurant, increasing fire risk. A passageway out to W. 9th St. would be very difficult to find at night and especially if a fire was on, and yard full of smoke.

————————, —— University Ave.

When it is remembered that from 160 to 300 rough men center in here from the various sleeping places, the washroom can be imagined and the towels which are

like those in a fourth class printing office.

———, —— University Ave.

In rear of about ——— University Ave. with same proprietor. Their beds are placed 20 inches apart up under slant roof. On hot afternoons the air is vile. It is inhuman to ask thirty men to sleep in such a place. Men wash at another hotel. Place in which men sleep is fully as bad as anything we have found in the city, building is wooden, ramshackle and has rickety outside stairs. One man told me that many men move simply because they cannot endure such sleeping conditions. The first floor is in such extra bad repair it is not used now. Windows boarded up. One in passing would never imagine house is used at all. Over large room has been written in chalk "Hotel de Bum". Outside downstairs some one has chalked: "All who inter this home leave all hop behinde." A refuge comparable with the famous sewer lodgings of Paris.

Rear exit of hotel. Gate locked.

Annex ———

Investigator found beds all torn up. Man who takes care of rooms said had been burning sulphur—"to kill bugs." Air was still so bad one could hardly breathe. This man said; "Pretty rotten, huh?" Evidence of much drinking in rooms.

Annex ———

It would hardly be possible to overstate conditions in this Annex and one side of Annex ———. There are no fire escapes. Paper and rubbish in hall—increasing fire risk. From number of whisky bottles it is evident there is much drinking in rooms.

————, —— Minnesota St.

No sitting writing-recreation room.

————, —— E. 7th St.

This place is run by two women. The one who showed investigator round is the confidential sort and decidedly suspicious. Wanted investigator to "send her some business." Without doubt her second floor rooms are rented to transient couples. She was wholly unable to explain how it comes she charges $1.00 for a nice large room with two great big windows and the same for a 6x8 room. No sitting room.

————, —— E. 8th St.

An assignation house. In most all rooms may be seen the little wash basin used by women. While investigator and proprietor were talking by the office, a painted prostitute stepped into stairway with a man. Seeing us he fled. When investigator came down in a minute and passed out, she ran after her victim, pulled his coat, trying to induce him to come with her—but he refused, whereupon she cursed him. This in broad daylight. Proprietor claims he has men roomers.

————, —— E. 7th St.

Proprietor would have investigator believe he has laboring men roomers. Proprietors of lodging houses around him say he has a few rough fellows on 4th and 3rd floors, but caters to the "Couple Trade"—many of them disreputables.

————, —— W. 7th St.

There are no fire escapes. Brick building. Wash rooms, poor condition. Roller towels. Evidently much drinking going on. Empty beer cases about in halls. Men staggering up to their rooms.

————, —— Minnesota St.

Proprietor was in a hurry to say he has "most all men roomers." This place formerly was raided at different times and has frequently changed hands.

————, —— E. 8th St.

This dirty place certainly does not deserve the name "Hotel." It is a fire trap. Men asleep in little coops on 4th floor would not have one chance in a hundred to escape, should fire break out. The whole building is a make-shift, an old wooden structure made over—making it exceedingly difficult to keep clean. This proprietor owns also the ———— which has often had trouble with the police.

————, —— E. 7th St.

To stow away 62 men in 12 rooms and in such foul conditions is criminal. Investigator would consider Fire Marshal could stop use until changes are made. Wooden steps in rear to ground only fire escape. In case of fire men would be trapped in inside rooms like rats. Inside rooms, roller towels (foul condition) and vermin. In two rooms they were burning sulphur.

————, —— Jackson St.

No fire escapes. Rope appliance in several rooms so occupant may lower himself to ground. Wooden steps from 2d floor to ground in rear.

————, —— E. 6th St.

The place has had trouble with police (been raided when called the ————. Fined in court as disorderly house). Proprietor says he caters only to married transient couples. No regular sitting, writing, recreation rooms.

————, —— E. 5th St.

Was closed for a year under Abatement Law. Gas is used. Man lost his life about month ago—overcome by gas.

————, —— Vandalia.

No fire escapes. Lamps are used in hotel and shacks. Whisky bottles all around and 5 cases empty beer bottles in entry of hotel. Roller towels (filthy condition) are used in defiance of State Law.

————, —— Hampden.

These Midway Hotels are all run on about the same plan. Many rooms have large whisky bottles. 13 regular beds and 3 singles up in attic right under roof.

————, —— E. 3rd St.

Women there—Chief said they hung out windows. Gave warning to manager.

————, —— Rosabel St.

No fire escapes.

————, —— E. 8th St.

This old woman (in explaining cancellation of license) frankly admits she let immoral women frequent the place and bring men there.

————, —— E. 7th St.

Serious fire hazard. Movies on first floor. Fire broke out in picture show and threatened building.

————, —— W. 4th St.

Big fire risk.

————, —— E. 3rd St.

A marked fire hazard.

————, —— Como Ave.

Grave fault is that many of the locks are old, could scarcely unlock door. In case of fire this might cause loss of life.

————, —— Wabasha St.

Charitable Institution has long been known as not conforming to standards. Old Opera House made over. Fire Marshal condemned it. Sleeping rooms were found on either side of dirty toilets.

————. —— Jackson St.

Restaurant in this place called "———— ——" and one can feel the free and easy conditions of hotel upstairs. Much drinking in rooms.

————, —— Wabasha St.

Four people sleep in some of the inside rooms during rush times.

————, —— Wabasha St.

This is unquestionably one of the dirtiest places, morally, in town. There are ten inside rooms. The yard needs attention.

————, —— St. Peter St.

Few hotels are better fitted out or better kept. It is unfortunate that the moral condition is so much below the physical condition.

————, —— E. 7th St.

Building is old, everything dirty. No chamber maids employed—beds made by men. Roller towels. In several rooms the sunlight never enters.

————, —— E. 3rd St.

There are no rooms,—simply cots. One water closet of two compartments may accommodate 100 men. In winter men pay 10 cents to sleep on floor of office. Roof leaks terribly. Rear windows nailed at top, increasing fire risk.

————, —— E. 7th St.

No fire escapes. Manager explains they do not need them, since the men can escape to roof of adjacent building and go over two or three buildings where they will find fire escape to ground. No wash room on 4th floor. One on 3rd floor.

————, —— W. 4th St.

It rises in the rear to 3 stories. Fire trap. Narrow wooden stairs. Absolutely no protection against fire. Smoky, dirty lamps used. The proprietor has been arrested many times for violating liquor laws.

————, —— Minnesota St.

Investigator learns license was cancelled because of bad moral conditions. While they are supposed to rent only by the week, it seems some rooms are still rented by the day to transient couples.

———— Camp near Midway Transfer.

This camp has sleeping quarters in 5 cars on a siding. One car contains 20 bunks (singles) in doubledeck iron frames. There are 16 little windows 2x2 (screened) and side doors are left open for ventilation. Bunks dirty, poorly cared for. One car has 18 double-deck frames containing double beds accommodating 4 men each, 32 in car. 8 little windows, 18 inches by 24 inches. But one side door open. Dirty, poor beds. Another car has provision for 32 men. Regular sized beds, double deck. Car about 10x55 ft. 8 small (18x24 inches) windows and one door left open. One mattress badly torn. Beds bad condition. The next car is smaller, 9x36 ft. Contains 24 bunks. Has but four little windows (2½x2½). Doors open. Roof of car is low. Man who showed me around admits bunks have bugs in them. He says the average time a man stays is less than 10 days—that men come and go. The fifth car is same size and style as the 4th—provision for 24 men. Only three 2½x2½ windows and an end window 2x4 is screened. Only one side door open. A yard toilet structure is used by some 80 men, and is in rankest condition—a positive nuisance. Men wash in a long, low wooden trough. Roller towels extra dirty."

If, as it appears from the above statements, a considerable share of the rooming house and hotel accommodations in the City are used for illicit purposes, the problem is not one of shortage of accommodations, but one of weeding out unnecessary and obnoxious establishments, an intensive vigilance, and a control of the remaining establishments which do, so far as possible an honest business. This would reduce much of the fire hazard and save considerable in the difficulties now encountered by State and City officials in the control of vice and the liquor traffic.

That the war should be a strong impetus in stimulating drastic action is recognized by every one. If we are to retain our training camps and assist in maintaining a high standard of efficiency among the men who have come to this City for purposes of military training, the first step in the direction of increasing the control over the present situation, in so far as drink and morality are concerned, is the closing up of superfluous and law breaking hotels and rooming houses in the City of St. Paul.

LIGHT AND VENTILATION.

The problems of light and ventilation in hotels and rooming houses are mainly structural. The occupants do, of course, determine for themselves as to whether they care to use the existing ventilating facilities when such ventilation is to be provided by means of doors and windows; but the inadequacy of the provisions for both lighting and ventilation depends upon the character of the building and its location in relation to other buildings. The following Table shows the distribution of rooms according to light and ventilation.

Table XXXI. Showing distribution of rooms according to light and ventilation by size of establishment:

Number of Rooms in House	Light				Ventilation							
	Light		No Light		Good		Fair		Bad		Very Bad	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
6-10	48	76.18	15	23.82	27	42.82	13	20.64	11	17.47	12	19.07
11-20	401	75.34	131	24.66	326	61.25	67	12.60	27	5.07	112	21.08
21-30	283	72.46	108	27.54	267	68.29	12	3.06	16	4.09	96	24.56
30 and over	965	68.78	438	31.22	820	58.46	155	11.03	63	4.49	365	26.02
Total	1697	71.05	692	28.95	1440	60.27	247	10.25	117	4.89	585	24.49

The above Table reveals the fact that 692 out of a total of 2394 rooms, or 28.95 per cent. were dark. Of these rooms some were completely devoid of light and had no windows to the outer air, while others had windows opening onto narrow passage ways or shafts. These dark rooms provide accommodations for 1006 persons. With almost one-third of the rooms dark it is needless to comment upon the need for more rigid law enforcement, and the closing up of a very considerable number of these rooms so that they may not be used for purposes of housing lodgers. That the frequency of dark rooms increases with the increase in the size of the establishment is evident from the above Table, which shows only 23.82 per cent. dark rooms in establishments of less than ten rooms, and 31.22 per cent. dark rooms in establishments of more than 30 rooms, with a gradual increase between these two extremes.

The condition of bad ventilation corresponds in frequency to the frequency of bad lighting. Only 1440 rooms out of a total of 2389 rooms examined for ventilation were adequately provided with means of changing the air either by some method of artificial ventilation or by means of windows and doors. As in the case of lighting, the greatest frequency of the worst provisions for ventilation were found in the hotels and rooming houses with 30 rooms or more. It must be said, however, that there were a very considerable number of small establishments with rooms badly ventilated (17.47 per cent).

The whole problem of lighting and ventilation is intimately related to the fire hazard. Dark alleys, air shafts, and dark rooms are the true measure of the fire hazard represented by the rooming houses and hotels of the City of St. Paul.

We cite below some of the most important cases of conditions which represent fire hazard. Sufficient to say that out of a total of 47 establishments with more than 20 rooms, 26 were found to present a serious menace to occupants in case of fire. Absence of fire escapes, locked back yards with narrow obstructed front exits, nailed up windows, keys that do not work without a great deal of manipulation and effort, halls obstructed by furniture or beer cases, and similar conditions were found, and no control seems to have been exercised to remove these conditions.

The difficulties in the way of enforcing legislation through the State Fire Marshal and the State Hotel Inspector seems to be mainly lack of funds. The law is quite adequate for the removal of the most flagrant abuses at least.

Valuation of Properties and Revenues

In considering the valuations of properties we were compelled to resort to the only source of information available and which is perhaps both most reliable and has been made on a basis that has some scientific value, namely, the Assessor's Office of St. Paul.

On the basis of these figures we were able to secure information relative to gross returns in rentals obtained from three classes of property, namely: single dwellings, two family houses and three or more family houses which are ordinarily defined in housing legislation as tenements.

In order to avoid misinterpretation of figures, all properties which contained stores and where the value of the store could not be separated from the rent of the building occupied for residential purposes and also in order to avoid confusion due to unlet property, we have included in our calculations only such properties as were actually and fully occupied for residential purposes.

The total amount of property values considered was $3,458,533 and the rents from these properties should be about $333,829.20, or a rate of 9.66 per cent gross. This rate is not excessive, if the conditions were the same throughout and the people were getting proper accommodations. As we generally conceive of rental rates in the poorer section of American cities, and considering the cost of maintenance, the amount of repairs that are needed, at least sometimes, in order to save the property, if not to save the health of the occupants, the taxes, water rates, etc., would seldom leave more than from five to six per cent clear, which for this type of property is quite low. To what extent the valuation recorded by the Assessor corresponds with the actual values of the property we are not prepared to say. Those familiar with local conditions are in a better position to furnish such information.

That all properties did not yield the same rate of revenue is evident when we consider one, two and three family houses separately. It was found that on this basis the single dwelling yielded a gross return of 6.31 per cent as compared with 12.06 per cent for two family houses and 11.87 per cent for dwellings with three or more families. This rate of annual return is especially interesting because it shows that the best paying property is not, as is ordinarily assumed, the tenement with three or more families, but the two family house, which is frequently occupied by the owner and one tenant or only by tenants.

While the ideal home is the one family building with private yard and with light on all sides, the alternative of two family houses seems to be satisfactory as an investment and is, of course, far superior to the tenement which is so undesirable for sanitary as well

Junk yard surrounded by dwellings.

Junk dealer's store and home.

as social reasons. It is understood, however, that from the point of view of the real estate owner two-family houses built as a duplex are not profitable and do not offer a good market.

That the rate of revenue shown for the whole of the area studied does not hold true of some of the individual districts is shown by the fact that District II, which is classed as poor and deteriorated, showed practically no difference between the rental rates of tenements and two family houses, the former yielding an average rental rate of 12.08 per cent as compared with 12.28 per cent for the latter. District IV, which is fairly good, but where the one and two family houses are mostly old structures, while the multiple dwellings are of more recent construction, shows a rental rate of 13.36 per cent for tenements and only 7.85 per cent and 9.80 per cent for one and two family houses respectively. That the tenements being new should yield a high rental rate was to be expected, but as tenements deteriorate more rapidly than one and two family houses this rate can hardly persist for any considerable length of time.

The other two districts which show a rather abnormal distribution of rentals was found in Districts X and XVII. In the Tenth District the rental rate ranged from 10.64 per cent for one family houses to 13.06 per cent in two family houses, and 14.46 in the tenements, while in the Seventeenth District the rentals ranged from 12.61 per cent in single dwellings, 14.36 per cent in two-family houses and 15.81 per cent in tenements. These districts in which the tenements are such paying investments were among the worst found in the City of St. Paul.

The other districts did not deviate materially from the general rental rates revealed by the figures relating to the entire area considered in this survey. The tendency toward tenement construction, which, as has been shown, does not pay on the average as well as the two family house, is due in many cities to the need for congestion caused by limited land areas available for the building of homes.

Table XXXII shows the distribution of land areas by districts according to occupancy.

Table XXXII. Shows the distribution of land areas according to districts, according to occupancy:

District	Unoccupied	Per cent	Occupied	Per cent
I	818,200	50.05	816,700	49.95
II	948,450	27.82	2,450,625	72.18
III	.....	.....	.....	.....
IV	665,000	46.65	761,950	53.35
VIII	176,475	13.67	1,114,025	86.33
IX	481,125	24.61	1,472,900	75.39
X	1,189,789	28.58	2,974,688	71.42
XI	484,592	19.91	1,945,653	80.09
XII	257,375	14.55	1,512,265	85.45
XV	516,025	45.78	612,450	54.22
XVI	215,825	11.32	1,690,150	88.68
XVII	905,847	22.38	3,157,185	77.62
XVIII	269,825	43.35	352,300	56.65
	6,928,528	26.85	18,860,891	73.15

With 26.85 per cent of the area studied unoccupied the problem of congestion is far from becoming serious especially if we remember that these are the most congested residential areas of the City of St. Paul. The

opportunity for a concrete demonstration of the possibilities for the construction of cheap, comfortable one or two family houses which would stand out as an example of good planning for the actual needs of the people of a given district, is nowhere more imperative and favorable than in the very districts in which so much squalor, dilapidation, neglect and bad management were found. From the point of view of its availability, there is no land problem in the poorer section of the city, although there is a distinct and growing problem of congestion of buildings, as we shall point out later.

VALUATION OF LAND AND BUILDING.

It has been shown that 26.85 per cent of the land area in the districts we have studied is non-productive. When we turn from the measurement of the unoccupied area to its valuation we find the following:

Table XXXIII.

LAND VALUES

District	Unoccupied	Occupied	Building values
I	$442,575.00	$127,900.00	$346,965.00
II	133,650.00	364,325.00	797,650.00
IV	80,200.00	168,150.00	259,825.00
VIII	96,150.00	990,800.00	588,450.00
IX	48,850.00	433,325.00	726,700.00
X	92,500.00	406,605.00	1,068,725.00
XI		59,510.00	9,795.00
XII	67,155.00	441,580.00	878,050.00
XIV	34,500.00	149,225.00	456,435.00
XV	37,375.00	76,800.00	258,170.00
XVI	31,850.00	267,275.00	618,225.00
XVII	69,130.00	426,775.00	1,138,750.00
XVIII	5,350.00	37,300.00	36,350.00
Total	$739,285.00	$3,949,570.00	$7,184,090.00

These figures show $739,285 worth of land out of use or 15.75 per cent. of the total valuation of the area studied for which we were able to obtain a more or less accurate estimate of values. The proportion of values of unused lands does not correspond to the proportion of the unused area. Whether this is due to a lower assessment on unused land or whether the unused areas are less valuable we are not competent to judge. The assessment of the occupied land averages about 21 cents a square foot, while the average assessment on unoccupied areas is 16 cents a square foot. This low value of properties suggests the very pertinent question of facilities for parking and playground areas which at this time could be obtained by the municipality at a very low cost, especially as those districts are most in need of more ample and more strategically located playground facilities, both because of the greater congestion of population and because of the marked differences in the character of various unit areas which form distinct social and economic strata.

Table XXXIII presents another rather interesting feature to which attention should be called, namely, the relation between assessed valuation upon land as compared with the buildings or so-called improvements.

Bakery with barn attached. Filthy surroundings.

The total valuation of the occupied land is $3,949,570, while that of the buildings is $7,184,090. In other words, the value of the land is 35.45 per cent of the total valuation of built up areas. This is greatly out of proportion with what is ordinarily recognized as a standard of land value in relation to houses in areas where strictly tenement property, such as we see in New York or Boston, has not yet developed. Twenty to twenty-five per cent would be sufficient value for the density of population and extent of congestion of buildings such as we found in most of the areas studied.

LOSS TO THE COMMUNITY DUE TO NON-USE OF PROPERTY.

The impression conveyed to one examining, even superficially, the areas to which this housing survey relates, prompts one to refer to the waste due both to unoccupied territory, and to unoccupancy of buildings with a view to interpreting the facts in terms of social values.

In an earlier part of this report the frequency of vacancies and losses of rentals through such unoccupancy was referred to. The figures compiled in connection with the earlier discussion, however, relate to dwellings alone. The following table deals with all rentable properties, including stores, pool-rooms, etc.:

Table XXXIV. Showing total rentals for month received and lost through occupancy, by districts:

	RENTALS			
District	Unoccupied	Per cent	Occupied	Per cent
I	$254.00	$13.99	$1,562.00	86.01
II	866.50	15.11	4,869.25	84.89
III	34.75	23.01	116.00	76.99
IV	282.75	15.84	1,497.58	84.16
VIII	522.00	7.05	6,882.00	92.95
IX	924.00	16.5	4,679.30	83.5
X	948.00	20.45	3,679.00	79.55
XI	34.50	7.8	407.50	92.2
XII	893.25	10.82	7,357.00	89.18
XIV	288.00	10.15	2,573.75	89.85
XV	219.50	9.59	2,066.75	90.41
XVI			1,292.10	100.00
XVII	217.25	6.37	3,189.80	93.63
XVIII	32.25	12.1	234.50	87.9
Total	5,516.75	11.99	40,406.53	88.01

A glance at the above table shows that $5,516.75 is lost every month because of unoccupancy. This means a loss of $66,201.00 per year in rentals from unoccupied properties, and in the Third and Tenth Districts the loss through failure to rent exceeds one-fifth of the total rentals collected in those areas. When we add to this loss the unproductive values in land, we have a very considerable problem which adequate organization of the real estate interests, the development of promotive social methods of construction of homes, combined with social rent collection might, at least partially, obviate. The cost of such organization and focusing of effort in the direction of making property productive would be trifling compared with the losses that keep multiplying and increasing with every additional year.

Mushroom caves and manure piles near homes.

Relation Between Housing and Other Social Conditions

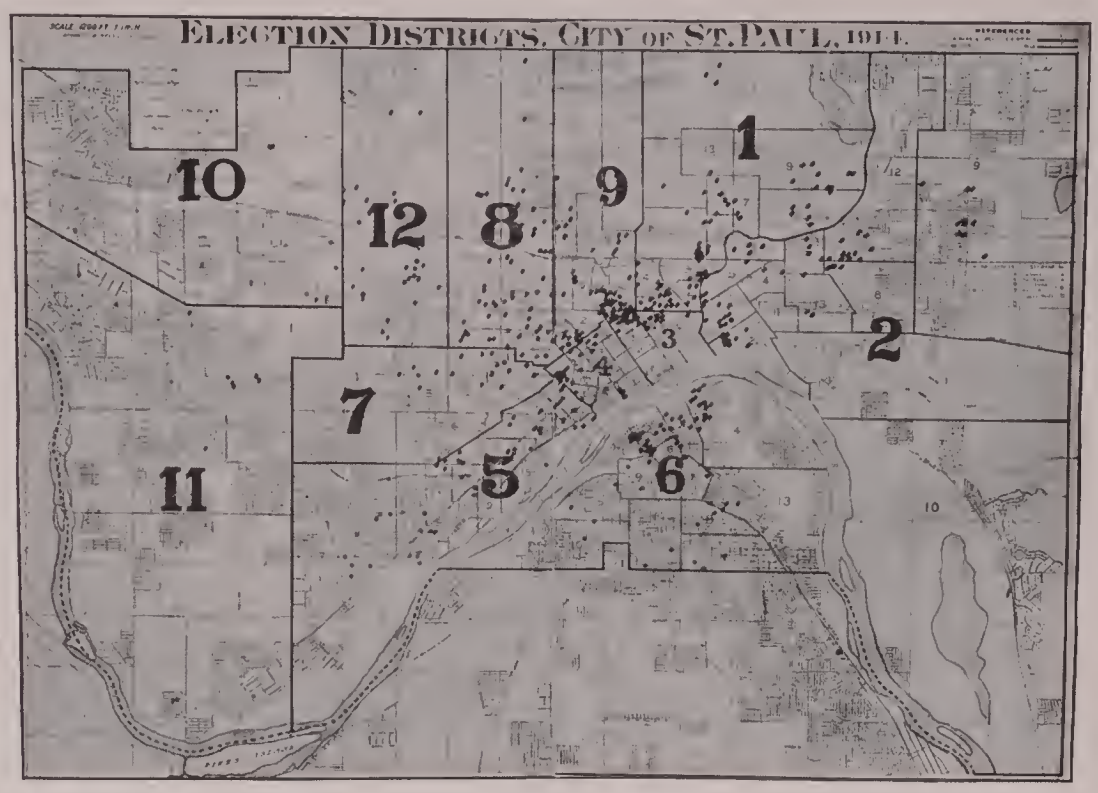
Map showing distribution of cases of dependency dealt with by the United Charities of the City of St. Paul in 1916. Prepared by C. C. Stillman.

It has frequently been shown that the improvement of housing conditions is co-extensive with the improvement of the physical, mental and moral conditions of the people whose homes have been improved. The effect upon the death rates, the morbidity rates, the physical development of children, the rate of crime, etc., due to the removal of families from slum areas into garden city communities has been proved beyond a doubt. Within the scope of this inquiry it was not feasible to undertake a lengthy inquiry into the relation between various social factors and housing. We were, however, able to study the distribution of cases of relief, cases of tuberculosis and cases of juvenile delinquency in relation to the areas studied, and which on the whole represent the major portion of the most poorly housed families in the City of St. Paul.

Map showing distribution of cases of tuberculosis in 1916 in the City of St. Paul. Prepared by Miss Virginia Rice.

The accompanying maps show the distribution of cases of relief, tuberculosis, and juvenile delinquency dealt with by the United Charities, the Tuberculosis Division of the City Health Dept. and the Juvenile Court, respectively.

While the distribution of cases does not correspond exactly with the geographic areas studied in the course of this survey, the concentration of cases in these areas is such as to warrant the conclusion that a close relationship between those factors does exist.



Map showing juvenile delinquency cases in 1916 in the City of St. Paul.
Prepared by Dr. A. J. D. Haupt.

HEALTH AND THE CITY BUDGET.

Housing is a health problem and the control of housing conditions depends, at least in part, upon the amount of money available for inspection and prosecution of cases of insanitation found in the community. An examination of the budget of the City of St. Paul shows that there has been a general increase in appropriation of $279,557.20 in 1917 over 1916, or 9.77 per cent. On the other hand the increase in the appropriation for health work in St. Paul for 1917 as compared with 1916 was $4,260 or 6.65 per cent or less than the increase in the total budget.

A comparative study of the cost of health work per person in the various cities of the class of St. Paul shows that while the average per capita cost of health work in cities of between 100,000 and 300,000 population was 31 cents, the average per capita cost in St. Paul was only 25 cents.

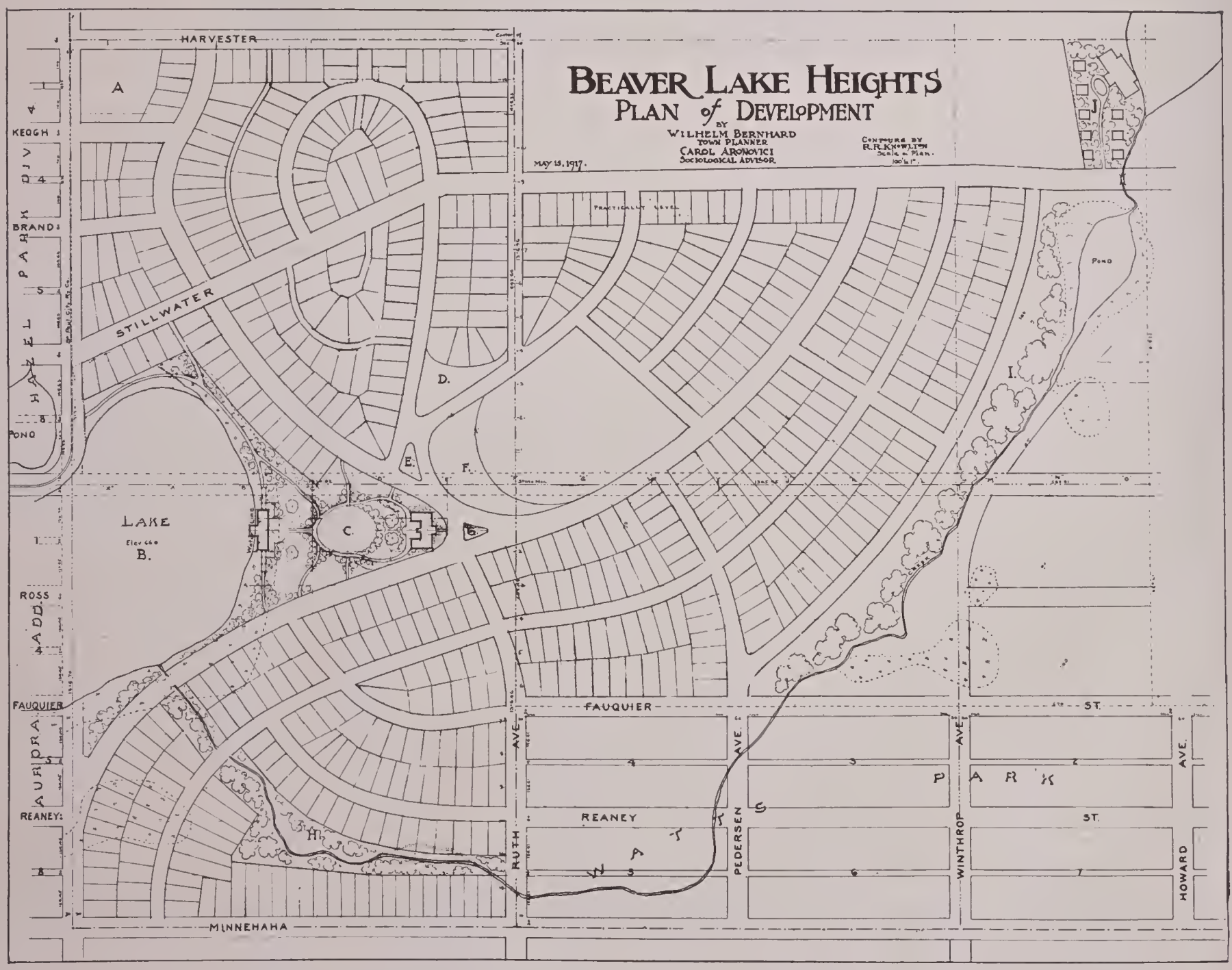
We have cited these figures as indicative of the fact that on the whole, the health work of the City of St. Paul, which includes housing control, is far below the average in financial resources for such work, even though the Department of Health may be highly efficient.

Achievements to Date

It was the policy of the Housing Commission and the Director of this Survey to avoid giving unnecessary publicity to the information gathered in the course of the investigation. This was necessary in order to make it possible to enter the homes for purposes of investigation. There were, however, conditions which seemed so flagrantly dangerous to the health of the occupants as to place upon the Commission the responsibility for reporting the conditions in order to secure action on the part of the Health Department of the City.

In 31 instances definite reports were made to the Health Department and in most cases satisfactory action was secured. In the course of the investigation, owners became aware of the dangerous conditions that existed in their properties, and improvements of more or less extensive character were made. This was especially true of the improvement of toilet facilities, and the removal of waste that was either dangerous as a fire hazard, or as a menace to health. In many instances, conditions found to be especially objectionable were found to have been removed at the time of a second inspection, and this action was taken without interference on the part of the Housing Commission or its representatives.

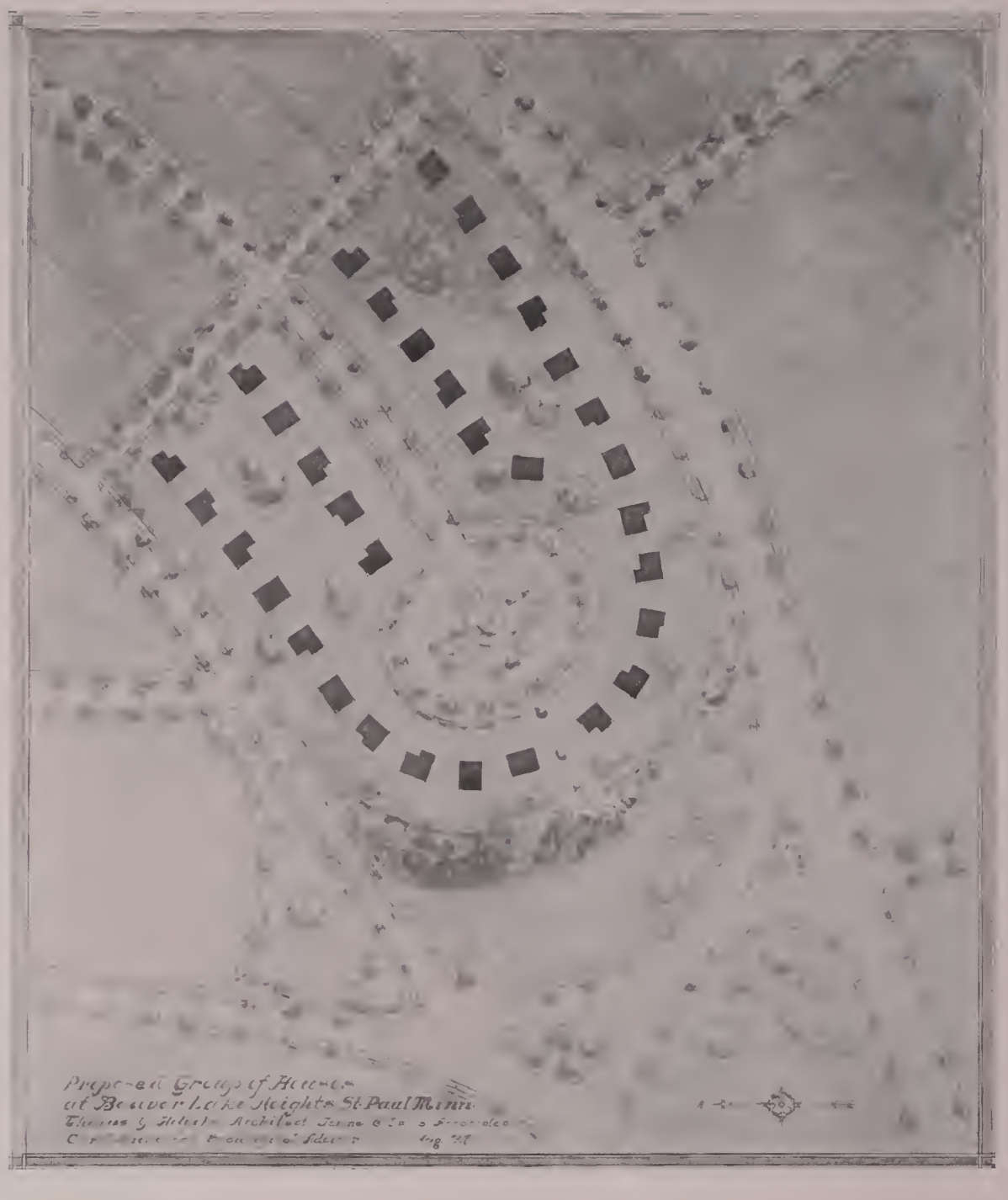
At the time of the investigation it became apparent that the method of street development, particularly in the poorer sections of the City, tended toward the monotonous "grid-



iron" system, which is wasteful of land and wholly unattractive from the esthetic point of view.

As an experiment, the area located in the proximity of Beaver Lake was laid out under the supervision of the Housing Commission, with the assistance of Mr. Wilhelm Bernhard, of Chicago. This plan, with some modifications, was accepted by the City, and a number of small cottages are already being constructed in this area.

A cut on page 70 shows a general plan of that area as laid out by Mr. Bernhard, with the co-operation of the writer. Whether the homes constructed in this area will be up to standard from an architectural point of view will depend entirely upon those who are financially responsible for the promotion of this enterprise.

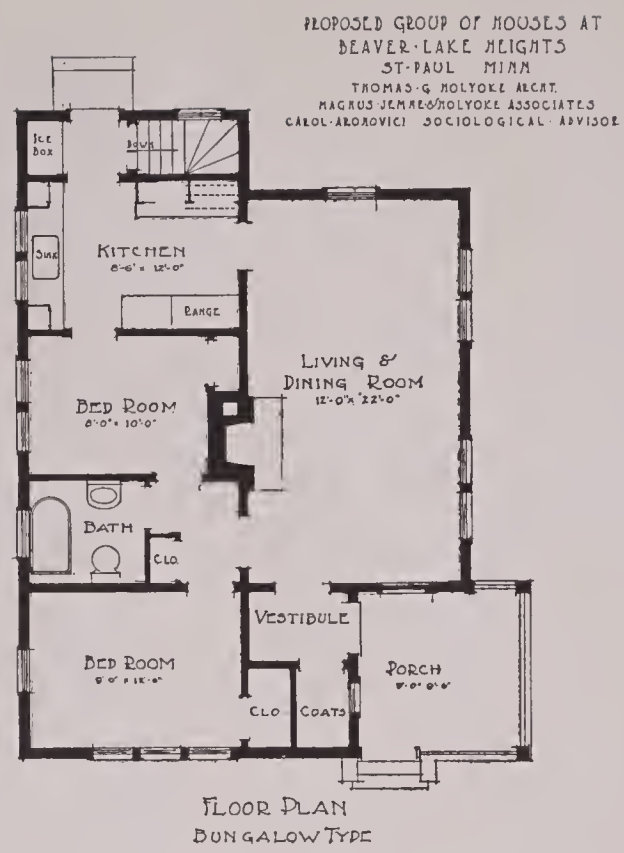


Proposed grouping of houses on six acre grounds.

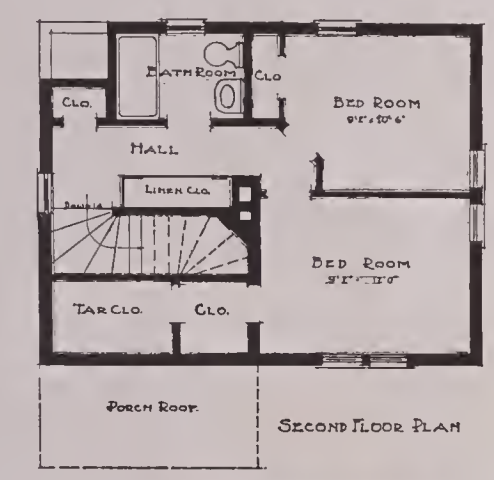
It was hoped by the Commission that before the completion of the Survey, a Housing Association would be organized for the purpose of building cheap and attractive workmen's homes, and with this object in mind, an option upon six acres of land, to be used for the purpose of constructing a number of such homes was secured from the owners of the Beaver Lake area mentioned above. Through the kindness of Mr. Thomas G. Holyoke, an architect and member of the Housing Commission, a tentative plan of the development of the six acres upon which an option was secured, was prepared, and a number of drawings and sketches of houses were submitted.

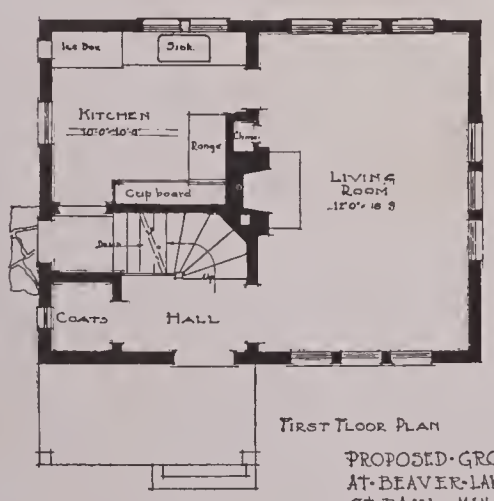
Small Wage Earner's Home.

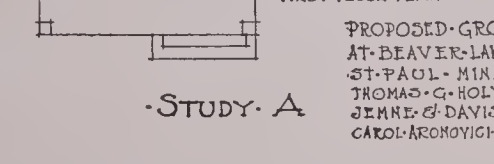
In the preparation of these plans and sketches, the needs of a workman's family were considered in relation to the high cost of materials that prevails at the present time. The average cost of the houses, sketches of which are presented in this report on this page is between $2,500 and $2,800, on the basis of prices prevailing on October 17th, 1917. It must be admitted that these houses are above the standard generally included in a survey of housing conditions such as are dealt with in this report, and also, that these houses are above standard both from an esthetic and from a practical point of view and compare very favorably in cost with houses that would command small investments and which are highly unattractive and ill adjusted to the American homes of the wage earning class.



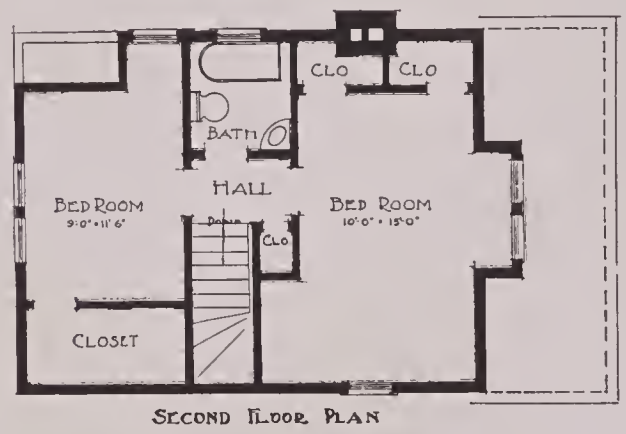
Studies of room arrangement for wage earners' homes.

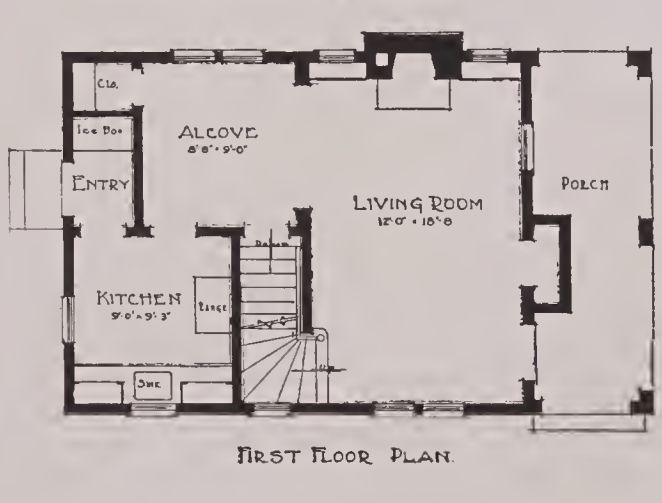


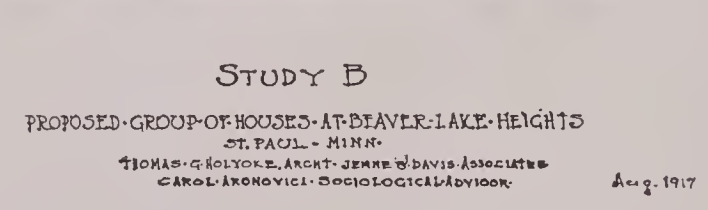




Study of room arrangement for wage earners' homes.







Study of room arrangement for wage earner's home.

It is to be regretted that housing reform is ordinarily confined to slum areas, and does not contemplate as a rule, the improvement of the standard of attractive homes for all of the people. It must be admitted, nevertheless, that improvement in the housing conditions of one class of wage earners, however highly skilled they may be, if it does not involve an increase in the cost of such homes, is bound to have a beneficial effect upon the community as a whole. It is for this reason that the plans prepared by Mr. Holyoke are included in this report.

Study of possible housing scheme in outlying district of St. Paul.

Conclusions

The recommendations published elsewhere in this report embody constructive suggestions for the improvement of conditions based upon first-hand evidence. Some of the evidence, however, while of importance in gauging the seriousness and character of the problem has no particular bearing upon the methods of improvement, except as a means of shaping public opinion in favor of housing reform. Some of the general conclusions which suggest themselves from an examination of the facts are as follows:

1. The legislation bearing on the control of housing conditions in St. Paul is inadequate.

2. The Health Department is unable to enforce existing laws for reasons of shortage of appropriation and inadequate inspection force.

3. Structural defects of new buildings and the low standard of construction prevalent in the earlier days of the development of St. Paul are more largely responsible for bad housing than the habits and standards of life of the people.

4. More than one-third of the population whose homes were studied belong to the classes generally designated either as American or of nationalities with high standards of living.

5. In districts examined, home ownership is more prevalent among the Jews, Italians, Germans and Scandinavians than among the Americans.

6. There is no serious problem of room congestion in the homes of the City of St. Paul, at least, in the districts examined. A few cases of excessive crowding were found, but they were by no means typical of the general condition.

7. Single dwellings were in poor repair in greater proportion than the multiple dwellings. This is due to the greater proportion of single dwellings of old construction.

8. In the sections examined there is no shortage of dwellings. There is, however, throughout the City a shortage of homes of high grade adapted to the needs of wage earning families.

9. There is a superabundance of toilets, the use of which is shared by from two to ten families with the result that a disproportionate amount of irresponsible use, disrepair and general neglect were found.

10. The lodger evil which is so intensely difficult to control in eastern cities is very much less acute in St. Paul. There is, however, a most serious problem of housing the single men and single women, which is coupled with the difficulties to control the rooming houses and hotels of the City. The latter involves a moral as well as a health problem.

11. From the statistical data we were able to gather, it would seem that the two family house represents a better investment from the point of view of revenue-yielding power than either the single dwelling or the tenement or multiple dwelling.

12. Almost sixteen per cent. of the land area in the sections studied is unoccupied. The assessments show low values which suggest the desirability of securing open spaces for much needed park and playground purposes.

13. The poor arrangement of the lots, the unscientific placement of buildings, the

uncontrolled heights of buildings and absence of regulation regarding distances between walls, have caused a disproportionate amount of bad lighting and ventilation and many dark rooms, characteristic of the older slum areas of the City of New York.

14. The failure to provide a city-wide zoning system has done considerable damage to valuable property which might otherwise have been protected. The present zoning system is hardly adequate to meet the needs of the City of St. Paul.

Recommendations

HOUSING CODE.

The experience derived from the present investigation and a comparative study of the housing legislation affecting building enterprise in the City of St. Paul and in other cities of similar size and character shows conclusively that additional legislation is needed to meet the local situation.

Builders and other persons financially interested in the business of contracting and maintaining dwellings of various types have done a great deal toward assuming certain standards of construction which would safeguard structures against collapse or other destruction due to poor methods of construction. The fear of criminal prosecution has removed this aspect of housing legislation from the field of reform into the realm of self protective methods in the interest of builders and owners. It is the neglect of the essential necessities of health, privacy and comfort that most requires the attention of the housing reformer and housing legislation. All dangers from violent injury and death being removed in most instances, there still remains a vast field of legislation and control that deals with those aspects of the housing problem that relate to the protection of tenants and owners occupying their own homes against the almost imperceptible, but positive, wasting of health. While the increase in the death rates cannot always easily be traced to bad housing, there is overwhelming statistical evidence of the close relationship between these two factors.

That crime and immorality and dependency are coupled with bad housing has been shown by the maps published in this report and which correspond closely to the worst areas studied in the course of this inquiry.

A comprehensive city ordinance is appended to this report in the hope that the City which has ample power to do so will adopt it in full as the first means of providing adequate housing legislation for this City.

Certain changes in the present administration of housing legislation are made with a view to increasing efficiency at a limited cost to the City. Eventually it is to be hoped that a State-wide code will be passed by the State Legislature so that uniform control may be exercised throughout the State, and through its instrumentality a State Department of Housing established, such as is in vogue in New Jersey and has been suggested for the State of Pennsylvania. For the time being, however, there is immediate need of action, and local legislation is within the reach of the community, thanks to its present charter which gives to the municipality a considerable amount of home rule.

It is to be hoped that the passage of a local ordinance will carry with it sufficient appropriation to meet the needs for adequate enforcement.

HOUSING BUREAU.

Owing to the difficulties encountered in securing low rent dwellings, the various local agencies are frequently confronted with a situation where they actually assist in the payment of rentals in buildings which are below all standards of sanitation. That there are vacancies of houses which are superior to many of those at present occupied was evident from the facts we have been able to gather in the course of this inquiry. How to keep account of families that need removal from their present environment and

secure better accommodations for them is a problem that has not been met so far because of inadequate organization or absence of proper machinery.

A Housing Bureau attached to one of the existing organizations which would be devoted to the work of removing families to better houses and improved surroundings, and which at the same time would keep in constant touch with social agencies regarding the sanitary condition of the homes of their beneficiaries, would be of enormous advantage to the families living under subnormal conditions of housing. Such a Bureau could also act as a means of checking up the work of health inspectors, building and plumbing inspectors and other officials entrusted with the protection of the sanitation and safety of the homes of the people.

The St. Paul Association, the United Charities, the Wilder Charity or all of these could become directly responsible for such a Bureau. Its cost in a City like St. Paul would be trifling compared with the service rendered and the continuity that could be given to housing reforms through this medium.

In view of the experience of other cities where housing surveys have merely resulted in temporary agitation, with a few palliative improvements, but without the development of constructive, progressive programs, one is prompted to assign a great deal more importance to a Housing Bureau than is suggested in the above discussion. Many cities have felt the need for separate permanent organization with budgets ranging from $2,000 to $15,000 per year which are devoted entirely to the interests of housing reform. Whether there is need for an independent organization of this magnitude in St. Paul we are not prepared to say. This will be determined wholly by the effectiveness of the work of the existing organizations and the willingness of the City government to heed the needs that have been made apparent through this report, and to act promptly and with the breadth of vision that the importance and magnitude of the local problems demand.

SOCALIZATION OF RENT COLLECTING.

The experience of that very remarkable pioneer in housing reform, Miss Octavia Hill, and the service rendered by the Association bearing Miss Hill's name which has worked for over a score of years in Philadelphia, show that there is much to be gained from both the economic and social point of view by a systematic organization of friendly rent collecting. In the field of industry and commerce the socializing of the relationship between employer and employee, through welfare departments and other social service, has fostered a more intimate relationship between the two classes of people and has promoted efficiency. The methods which in the field of industry and commerce have tended to produce efficiency of service, may to the same extent promote better relationships between owners and tenants with economic results that would reduce losses through unoccupancy and failure to pay rent, while at the same time a reduction in the cost of maintenance due to careless use or abuse of property could be brought about.

This effort need not take the form of a philanthropy or semi-philanthropy plus 4 per cent. It could be organized by individual real estate dealers and agents on a cooperative basis, with a social service worker in charge of the collection of rents, the renting of unlet houses, the supervision of sanitary conditions, the control of the use of the facilities available, the making of necessary repairs, the promotion of garden work, etc., without in any way placing the service on the plane of charity work. In other words, the socializing of the business of rent collection could be brought about with as much benefit to the business of renting and the collection of rents as to the tenants themselves.

The large sums of money lost through failure to rent, the losses of from three to five per cent due to non-collection of rents, which so often occurs and the repairs necessary or required due to abuse of property could be reduced to a minimum at an almost insignificant cost.

It is suggested that this experiment in "Socialized Rent Collecting" be tried in some section of the City of St. Paul by engaging the services of a person experienced in this field, and familiar with real estate problems. The sum of $1,500.00 should be sufficient to test this method of handling real estate, especially in areas where much deterioration exists and loss through non-occupancy is considerable. In determining upon such a district where this experiment should be tried, the advice of the State Real Estate Board should be taken into account.

HOTELS AND LODGING HOUSES.

The hotels and lodging houses present a serious menace to the health, safety and morality of the community. The police powers of the City are adequate for the removal of the moral dangers, if only the Department in charge of the enforcement of the laws would exercise sufficient vigilance and take action where action is warranted. The courts should, of course, be induced to face the dangers that the numerous hotels present, and co-operate with the Police Department in stamping out the evils.

The control of the safety and sanitation of these hotels is in the hands of the State Hotel Inspector. This official has an appropriation of $6,000.00 per year, which is by $2,500.00 less than the income derived from the licensing of hotels and lodging houses. It is admitted that the present facilities for the inspection of the numerous hotels and lodging houses in the State is wholly inadequate, and that in most instances permits to operate are granted without any knowledge on the part of the State Hotel Inspector as to the fitness of the buildings operated as lodging houses and hotels. This condition has naturally led to laxness on the part of the managers and owners with such results as we have pointed out in the body of this report.

It is suggested that the Hotel Inspector make, with the assistance of the local Health Department and State Fire Marshal, a complete study of every hotel or licensed lodging house in the City of St. Paul and throughout the State if possible, so that at the end of the year when license renewals are applied for, the office of the State Hotel Inspector would have accurate and complete information regarding every establishment in the City and State which could be used in determining upon the right of owners and managers to operate under the existing laws.

In view of the fact that the present appropriation of the State Hotel Inspector is inadequate to meet the needs of the State, it is suggested that the City of St. Paul arrange through its Health Department to cooperate in the securing of an adequate system of inspection and the enforcement of both State Laws and City Ordinances, through the instrumentality of one inspector with whom both State and Municipal authority would be vested. Such a plan would avoid duplication of effort and facilitate law enforcement.

Another suggestion that occurs to any one familiar with the local lodging house and hotel situation, is the need for the construction of a cheap, sanitary hotel located

preferably in the Midway district, where a considerable share of the transient labor congregates. Such a hotel should be provided with adequate facilities for recreation, restaurant or boarding facilities at low cost, and should be under the management of a corporation or committee made up of citizens interested in maintaining an adequate labor supply, and who are actually employers of labor. Some member of the State Board of Health or its Secretary should be a member ex officio of the managing body.

The Bethel Hotel which is now being conducted as a semi philanthropic establishment and has proved a paying enterprise, should undertake this larger enterprise in preference to continuing the operation of the present establishment which is in every way below standard and should be considered under no circumstances as a philanthropic institution as it is a menace to the health and safety of the occupants. The Bethel Hotel should be closed at once and the managing Board should launch a movement for the building of an up to date workingmen's hotel.

THE REAL ESTATE BOARD.

In our efforts to secure data concerning the rate of deterioration of buildings of various types and the cost of maintenance, we found that no such information was available. The records of the real estate agents, while accurate in many ways are of no use for research purposes. It is suggested that the Real Estate Board of St. Paul undertake an extensive study of construction, maintenance and depreciation costs of single, two family and tenement house buildings in the City of St. Paul with a view to securing accurate information as to the paying powers of the various types of dwellings over a period of years. Such information may prove of social value to the community and of economic value to the real estate interests of the City.

In a bulletin recently issued by the Housing Committee of the National Association of Real Estate Boards, under the Chairmanship of Mr. Fred S. Smith of Minneapolis, the following statement is made in partial answer to the question as to the reason why Real Estate Boards should promote housing legislation:

"BECAUSE, for the protection of real estate interests, you must investigate and study local conditions and sincerely aid in the correction of existing evils and prevent their repetition in new buildings.

BECAUSE, if you leave this work to other civic organizations and individuals entirely, the penalty of your neglect is likely to mean drastic and possibly impractical laws or ordinances."

This attitude reflects credit on the national organization and points the way toward a new professional standard in real estate business which should prove valuable to the communities. The suggestion regarding the need for scientific study of housing problems in the light of their economic and social aspects is made in the hope that new facts may be brought to light which would remove housing reform from the field of superficial and sentimental speculation into the field of scientific legislation and law enforcement.

TOWN PLANS AND ZONING COMMISSION.

The City of St. Paul is protected by a zoning ordinance which is wholly inadequate to meet the needs of the city. The fact that the enforcement of the ordinance depends upon a limited number of property owners is bound to produce conditions wholly out of keeping with the needs of the City, and must in the end fail to protect in the aggre-

gate the normal and economic development of building enterprises, particularly in the residential areas of St. Paul.

Such sections as the Lower and Upper Levees, the Phalen Creek district, and the more recently developed areas of the community, need careful and painstaking consideration on the part of an expert body of engineers, townplanners, and business men, in order to provide the city with a careful plan for its future growth, which would direct the development of the city in the future along the most modern lines, both as an industrial and as a residential center.

Such a Commission should be created by ordinances of City Council, with an appropriation of not less than $20,000 to be expended during a period of two years, the amount to cover the development of an adequate zoning system, an adequate city plan, and a careful development of standards of heights of buildings.

Conditions surrounding public school.

Analysis of

Laws in Cities and States Throughout the Country.

THE following analyses of laws in cities and states are presented in comparative form for the purpose of furnishing a basis upon which to meet the deficiencies of the laws and ordinances affecting the housing of the City of St. Paul. This analysis lays no claim of completeness, as it would have been wholly impracticable to give the full text of the law in every case, with the modifying clauses and amendments that have been made from time to time. Wherever the "Model Law" is referred to it should be taken to mean the bill presented to the Pennsylvania Legislature in 1917 by the Building Code Commission of that state.

Wherever possible, we have compiled the abstracts from most recent printed forms available on the 1st of July, 1917. Abbreviations of legal provisions and summaries have been frequently necessary, and for this reason the possibility for misinterpretation of specific provisions has not been entirely obviated. Despite all these shortcomings, the writer feels that this synoptic analysis affords the reader means of identification of various laws and ordinances which should prove helpful to the reader interested in providing adequate legislation for the City of St. Paul.

Analysis of Housing Laws and Ordinances Affecting Various Cities and States.

LAWS REGULATING TENEMENT HOUSES

Baltimore, Md.
Building Code adopted July 6, 1908, with amendments to April 1, 1914.

Boston, Mass.
The Building Law of the city of Boston, Acts of 1907 as amended to 1916.

Bridgeport, Conn.
Building Code 1915.

Calgary, Can.
Building Ordinances, Oct. 1912, with amendments to May 1, 1914.

Cambridge, Mass.
Building Ordinance. Proposed Revision 1917.

Chicago, Ill.
Building Ordinances, Sanitary Code, April 1, 1913, with amendments to April 1, 1914.

Cincinnati, Ohio
Building Code as passed May 1, 1909, and as amended to January 1, 1917.

Columbus, Ohio
Housing Code, 1917.

Dayton, Ohio
Building Code December 27, 1916.

Denver, Colo.
Revised Building Ordinance, 1916.

Detroit, Mich.
Rules and Regulations for control of building, occupancy and maintenance of dwellings as adopted by Board of Health in 1916 and amended in 1917.

Duluth, Minn.
Housing Ordinance, April, 1914.

Indianapolis, Ind.
Building Code passed Nov. 17, 1913 and amended to 1916.

Louisville, Ky.
Building Ordinances, 1913, with amendments to May 1, 1914.
State Law of the Tenement for 1st class cities, March, 1912.

Lowell, Mass.
Building Ordinance, 1906.

Memphis, Tenn.
Building Code, Dec. 17, 1912.

Milwaukee, Wis.
Building Code, 1914.

Minneapolis, Minn.
Housing Act June 1, 1917.

New Orleans, La.
Building Code, as passed May 14, 1914, and amended to March 18, 1915.

Omaha, Neb.
Building Code, as passed May 14, 1915, and amended to March 18, 1915.

Paterson, N. J.
Building Code 1913.

Pennsylvania (Model Law).
Proposed act governing the construction, erection, enlargement, alteration, repairing, maintenance and safe guarding of buildings and the proper safe guarding of the health and lives of persons using such buildings.

Pittsburgh, Pa.
Manual of Building Inspection, 1909. State Law of Tenement for 1903. State Law for Plumbing and Sanitation, 1911, with amendments to April, 1914; also certain local ordinances.

Portland, Ore.
Building Code Revised to June, 1915.

Providence, R. I.
Building Laws, Traffic, Plumbing, etc., Ordinances, State Law. April, 1909, with amendments to April, 1914.

Richmond, Va.
Building Code, 1908, and as amended to 1916.

Rochester, N. Y.

St. Paul, Minn.
Building Code, July, 1913, with amendments to April, 1914.

Seattle, Wash.
Building Ordinance, April, 1910, with amendments to April, 1914.

Toledo, Ohio
General Ordinance 1905 with amendments to Feb. 1914.

Toronto, Can.
By-laws for regulating the erection and safety of buildings, April, 1913, with amendments to May 1, 1914.

Washington, D. C.
Building Regulations Feb. 1913. Plumbing Code Aug. 1913. Act of Congress approved March 19, 1906, and June 1, 1910, with Amendments to April, 1914.

Worcester, Mass.
Building and Plumbing Ordinances 1917.

DEFINITION OF TENEMENT HOUSE

Baltimore, Md.
Bldg. occupied by more than 3 families living independently and doing cooking on premises or by more than 2 families on floor so living and cooking.

Boston, Mass.
A tenement house is a building or any portion thereof occupied as a dwelling by more than 3 families living independently of each other and doing their cooking on the premises, or by more than 2 families living above the first story, so living and cooking.

Bridgeport, Conn.
Same as Model Law.

Calgary, Can.
An "Apt." house is any bldg. with separate housekeeping apts. for 3 or more families or for 2 or more families over story otherwise occupied.

Cambridge, Mass.
Dwellings occupied by more than 2 families doing their cooking on the premises.

Chicago, Ill.
Any house or building or portion used as a home or residence or 2 or more families living in separate apartments.

Cincinnati, Ohio
Same as Model Law.

Columbus, Ohio
Building occupied by 2 or more families. Otherwise same as Model Law.

Dayton, Ohio
All buildings occupied by two or more families. Otherwise same as Model Law.

Denver, Colo.
Any building occupied by 3 or more families as a dwelling, living independently of each other and doing their cooking on the premises.

Detroit, Mich.
Building occupied by 3 or more families (or by 2 families when portion of building is used for business purposes) living independently and having common rights and halls, etc.

Duluth, Minn.
Building occupied by more than 2 families living independently but having common right in halls, etc., and doing cooking on premises.

Indianapolis, Ind.
Any building occupied by 2 or more families. Otherwise same as Model Law.

Louisville, Ky.

Lowell, Mass.
Same as Model Law.

Memphis, Tenn.
Same as Model Law.

Milwaukee, Wis.
Same as Model Law.

Minneapolis, Minn.
A building occupied by several families in which rooms are occupied in apartments, suites or groups.

New Orleans, La.
Building occupied by more than 3 families living independently doing tbeir cooking on premises or by 2 families so living above 1st story.

Omaha, Neb.
A building used as a home for 2 or more families living in separate apartments.

Paterson, N. J.
Same as Model Law.

Pennsylvania (Model Law).
Any building or part of building occupied as a home by 3 or more families living independently of each other in separate apartments, doing their own cooking on the premises and having a common right in stairways, halls, courts and yards.

Pittsburgh, Pa.
Building occupied by 3 or more families living in separate apartments and doing their cooking on premises.

Portland, Ore.
All buildings containing suites or apartments used for permanent habitation by two or more families.

Providence, R. I.
Building occupied by more than 3 families living independently and doing their cooking on premises or by more than 2 families on floor with common rights to halls, etc.

Richmond, Va.
Any building used as a home by more than three families.

Rochester, N. Y.

St. Paul, Minn.
Bldg. occupied by 3 or more families living independently and doing cooking upon premises, or by more than 2 families on any floor so living and cooking and having common rights, halls, etc.

Seattle, Wash.
Bldg. occupied by 2 or more families living independently and doing cooking on premises, each having own water closet and having common rights in halls, etc.

Toledo, Ohio
Bldg. occupied by more than one family on a floor living independently and doing their cooking on the premises.

Toronto, Can.
Any bldg. which has 3 or more suites or sets of rooms for separate occupation by one or more persons.

Washington, D. C.
Bldg. used by more than 2 families living separately and doing their cooking on the premises.

Worcester, Mass.
An apartment house is one containing 3 or more apartments. No definition of tenement given.

FIRE PROVISIONS—Fire proof tenements

Baltimore, Md.
Tenement more than 5 stories or 70 ft. in height shall be fire proof. 1st story of non-fire proof tenement 3 stories high must be fire proof.

Boston, Mass.

Bridgeport, Conn.
All buildings over 4 stories high or 3 stories and basement or over 55 ft. high must be fire proof.

Calgary, Can.
Tenement more than 3 stories in height must be fire proof.

Cambridge, Mass.

Chicago, Ill.
Tenement more than 5 stories and basement shall be fire proof; tenement of 4 or 5 stories shall be of slow burning material and cellar and 1st floor fire proof.

Cincinnati, Ohio
Tenements more than 5 stories and an attic high must be fire proof.

Columbus, Ohio
Required when over three stories high.
*The lines under names of cities denote absence of regulation.

Dayton, Ohio
All hotels and tenements 5 stories or more in height or with topmost floor 50 ft. above average grade, shall be of fire proof construction.

Denver, Colo.

Detroit, Mich.
Buildings over 8 stories or 100 ft. shall be fire proof.

Duluth, Minn.
Tenement or dwelling over 3 stories high, must be fire proof.

Indianapolis, Ind.

Louisville, Ky.
All tenements of three stories and a basement in height must be of fire proof material.

Lowell, Mass.

Memphis, Tenn.
All dwellings over three stories and basement must be fire proof.

Milwaukee, Wis.
All apts., tenement and lodging houses 5 stories or more above the basement shall be fire proof. In non-fire proof tenements over 3 stories, 1st floor shall be of fire proof construction.

Minneapolis, Minn.
All dwellings three stories and over must be fire proof.

New Orleans, La.
Tenement of 59 ft. in height must be fire proof.

Omaha, Neb.

Paterson, N. J.
Those exceeding five stories in height shall be fire proof.

Pennsylvania (Model Law).
Tenements, dwellings, hotels and lodging houses, 3 stories or more in height shall be of fire resistive construction. Such buildings not more than 2 stories in height may be of mill construction or ordinary construction.

Pittsburgh, Pa.
Four stories or more must be fire proof.

Portland, Ore.
Any tenement more than 70 feet in height but not over 120 ft. must be of fire proof construction.

FIRE PROVISIONS—Fire proof tenements—Cont'd

Providence, R. I.
Tenements more than 4 stories high in the 1st or business district or more than 65 ft. high in 2d district must be fire proof.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Tenement more than 3 stories high shall be fire proof. When any such bldg. exceeds 100 ft. in height it shall not be less than 40 ft. wide.

Seattle, Wash.
No fire proof tenement shall exceed in height the width of the widest adjoining street plus 25 ft. and in no case 125 ft.

Toledo, Ohio
All bldgs. 100 ft. or more in height must be fire proof.

Toronto, Can.
Tenement over 35 ft. in height shall be fire proof.

Washington, D. C.
Bldgs. over 4 stories or more than 55 ft. high must be fire proof.*

Worcester, Mass.

FIRE PROVISIONS—Wooden tenements

Baltimore, Md.
No wooden tenement shall be made for occupancy by more than 6 families.

Boston, Mass.
May be erected outside the building limits if not more than 3 stories in height above the basement, nor over 1800 sq. ft. in area.

Bridgeport, Conn.
Prohibited in fire limits. When built in rows they must be separated by fire stops.

Calgary, Can.
Prohibited. Cannot be converted into tenements if they exceed 2 stories in height exclusive of basement or 36 ft. in height, or be wider than 30 ft. or wider than 60 ft. unless interior be subdivided by fire proof walls to that size. Private Bldgs. shall not be more than 36 ft. high.

Cambridge, Mass.

Chicago, Ill.
Forbidden inside fire limits. Outside of fire limits wooden tenements shall not exceed 45 ft. in height and above 2nd story it must not be occupied as a separate living apartment.

Cincinnati, Ohio
Prohibited in fire limits. If constructed in a row the division walls of different houses must be constructed of incombustible material.

Columbus, Ohio
No wooden tenement exceeding 2 stories in height shall be erected.

Dayton, Ohio
Hotels and tenements of not more than 2 stories may be of frame construction, but no hotel to be placed within 10 ft. and no tenement within 5 ft. of other buildings on lot line. No such building shall be erected within the fire limits, except stone.

Denver, Colo.
Prohibited in inner fire district if 80 ft. or more in height. In middle fire district all bldgs. must be semi-fire proof.

Detroit, Mich.
Wooden tenement or dwelling shall not exceed 30 ft. in height.

Duluth, Minn.
No wooden tenements shall be over 2 stories high.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Prohibited in inner fire limits. Shall not be nearer than 4 ft. to any other bldg. Rows of such bldgs. must be separated by walls of fire proof material.

Milwaukee, Wis.

Minneapolis, Minn.
Shall not be placed on same lot with multiple dwellings within fire limits. Wooden bldgs. shall not be built in row, not closer than 7 ft. to other bldg. to side lot line if 3 stories, 2 ft. added for every additional story.

New Orleans, La.
Outside the fire limits no wooden tenements shall exceed 2 stories in height above basement nor 4000 sq. ft. floor area.

Omaha, Neb.
May be built outside the fire limits when not more than 2 stories high.

Paterson, N. J.
Prohibited in fire limits. Shall not exceed 3 stories in height. Erection of 3 story frame double deckers is prohibited. Spaces betw. stud and joists shall be filled with incombustible material.

Pennsylvania (Model Law).
Tenements may be of frame construction when not more than one story in height.

Pittsburgh, Pa.

Portland, Ore.
Frame tenements shall not exceed 100 ft. in any direction, unless a wall of brick or terra cotta reduces the dimensions.

Providence, R. I.
Wooden tenements shall not exceed 35 ft. in height.

Richmond, Va.
Prohibited in fire limits. Those outside fire limits shall not be over 2 stories high. Ground areas of such bldgs. shall be 7500 sq. ft. for 1 story and 5,000 sq. ft. for 2 story bldgs.

Rochester, N. Y.
Construction of wooden tenements or conversion of other frame buildings into tenements prohibited in the fire districts. Additions of 70 square feet may be made for bathroom or water closets.

St. Paul, Minn.
Wooden tenements shall not be over 2 stories in height.

Seattle, Wash.
Wooden tenements shall not exceed an average of 3 stories or 30 ft. in height, not 4 stories or 40 ft. in any part.

Toledo, Ohio
Wooden tenements shall not be more than 45 ft. in height nor be inside the fire limits.

Toronto, Can.

Washington, D. C.
Tnmts. shall not be more than 3 stories or 40 ft. in height. Prohibited within fire limits. Tnmts. 3 stories high must be of fire proof construction up to and including 1st floor.

Worcester, Mass.
Prohibited in fire district Those built contiguous shall be separated by a division wall built of brick, terra cotta or concrete. Must extend from front to rear from basement to roof.
Only 2 apartments on floor.

FIRE PROVISIONS—Fire escapes, requirements for and details of construction

Baltimore, Md.
Every tenement over 2 stories must have one or more fire escapes. Every one 3 stories with 2 or more apts. on a floor must have fire escape for each vertical series of apts. General requirements for construction fixed in building ordinance.

Boston, Mass.
All tenement houses more than 3 stories high shall have 1 of the following means of egress beside front and rear stairs: 1. Enclosed stairway of iron or concrete, extending from roof to ground. 2. Iron balconies connecting with adjoining buildings. 3. Exterior escapes of iron, carrying 70 lbs. to sq. foot.

Bridgeport, Conn.
Metal fire escapes required for assembly halls.

Calgary, Can.
Bldgs. of 3 stories or more must have sufficient fire escapes as required by Supt. of Bldgs. Details of construction partially specified and left to Supt. of Bldgs.

Cambridge, Mass.
Metal or reinforced fire escapes shall be considered equivalent to 1 of the required exits for all buildings not more than 3 stories high. It may project over public way.

Chicago, Ill.
Every tenement 4 or more stories must have fire escape accessible for each apartment. Details of construction is required by State Statute and City Ordinance.

Cincinnati, Ohio
Tenements of 3 or more stories in height must have access to fire escape and stairway without passing thru another apartment. Fire escapes must be made of iron or steel and their location approved by Commissioner of Buildings. Inspection of fire escapes shall be made once a year.

Columbus, Ohio
Non-fire proof tenement houses 3 stories or more unless provided with 2 independent flights of stairs accessible from each apt. shall have an additional fire proof stairway or a fire escape, constructed of iron or stone.

Dayton, Ohio
One means of egress shall be the means of ingress, the other be an inside fire proof stairs. An outside landing with stairs descending from roof to grade, or a standard fire escape.

Denver, Colo.
To be provided in all two story bldgs. inhabited by more than one family. Shall consist of iron balconies connected by iron stairs. No., size and location to be determined by Bldg. Inspector. Not more than 50 persons to use any one fire escape.

Detroit, Mich.
For tenement over 2 stories high there must be 1 fire escape from 2nd floor to roof. If building is occupied by more than 300 above 1st floor, 2 fire escapes; by 600 3 fire escapes, by 900 as required by Department of Buildings. Details of construction specified in Building Code.

Duluth, Minn.
Every tenement must have sufficient means of egress in case of fire. Must be approved by Building Department.

Indianapolis, Ind.

Louisville, Ky.
All tenements of 2 stories and a basement in height or over, shall be equipped with such fire escapes as shall be deemed adequate by the building department.

Lowell, Mass.
Required on public buildings.

Memphis, Tenn.
Any room in any apt. not fronting on street or yard shall have fire escape in court projecting not more than 4 ft. from the house. Each apt. above 1st story shall open on fire escape from at least one room.

Milwaukee, Wis.

Minneapolis, Minn.
Shall be located at each story; shall consist of iron, stone or concrete balconies and stairs; shall be placed at an angle of not greater than 45 degrees.

New Orleans, La.
Every tenement more than 3 stories in height must have sufficient means of egress in case of fire. Must be approved by City Engineer.

Omaha, Neb.
Every tenement of 3 or more stories must be provided with fire escape. Every apt. must have direct access to at least one fire escape unless it has access to 2 flights of stairs. Shall be built of incombustible materials.

Paterson, N. J.
Balconies and stairs shall be of steel. Balconies shall be not more than 1 ft. below window sill. Shall descend at an angle of 60 degrees.

Pennsylvania (Model Law).
Non-fire proof buildings more than 3 stories high shall be provided with at least one fire escape or tower escape leading to every story with a stairway or gooseneck ladder to roof.

Pittsburgh, Pa.
Tenements 3 or more stories high shall have permanent safe external means of escape, number and location of such escapes to be governed by size of building and number of inmates. Buildings with over 100 persons shall have 2 such stairways. Details of construction partially specified and left to Councils of Cities.

Portland, Ore.
Tenements of 3 stories or over must be provided with 1 or more metal fire escapes, extending from 1st story to upper stories and roof. 2 escapes must be provided when population is 100-500 1 additional for every additional 500.

Providence, R. I.
Every tenement shall have proper means of escape in case of fire. Approved by Building Inspector.

Richmond, Va.
Every bldg. 2 stories or over shall be provided with fire escapes, stairways or other means of egress in case of fire as directed by Bldg. Inspector. Outside fire escapes of iron; those on inside of fire proof material and enclosed in fire proof walls.

Rochester, N. Y.
Every tenement over 2 stories high must have fire escapes opening directly from at least 1 room or private hall in each apartment at each story above the ground floor. Fire escapes shall be made of iron. The number is to be determined by size, structure, location and number of inmates.

St. Paul, Minn.
Every tenement must have sufficient means of egress in case of fire. Details of construction must be approved by Commissioner of Public Works.
Every building 3 stories or more in height if not of fire proof construction, shall be provided with stair fire escapes.

FIRE PROVISIONS—Fire escapes, requirements for and details of construction—Cont'd

Seattle, Wash.
Tenements must have sufficient means of egress in case of fire. Details of construction minutely specified in law.

Toledo, Ohio
Every tnmt. must have 2 independent means of egress accessible from each apartment. If over 3 stories, one escape must be enclosed in fire proof wall.

Toronto, Can.

Every tnmt. over 2 stories high shall have proper fire escapes. The exit from bldg. to fire escape platform shall be through a hall or corridor. Plans must be approved by Bldg. Insp. and by Chief of Fire Dept.

Washington, D. C.
Tnmt. of 3 stories or over 30 ft. in height must have one or more fire escapes connected with each floor, as commissioners of districts may determine. Plans of proposed bldgs. must be given to Inspector of fire escapes for examination as to number of escapes. Details specified in Bldg. Code.

Worcester, Mass.

FIRE PROVISIONS—Encumbrance of fire escapes

Baltimore, Md.
Prohibited. $100 fine.

Boston, Mass.
Fire escapes must be unobstructed.

Bridgeport, Conn.

Calgary, Can.
Prohibited.

Cambridge, Mass.

Chicago, Ill.
Prohibited.

Cincinnati, Ohio
Must open into street, yard, or alley. Cannot open into court unless court contains a fire proof passage. Fire escapes must be free from encumbrances.

Columbus, Ohio
Must be unobstructed.

Dayton, Ohio

Denver, Colo.
Balconies and stairs to be unobstructed. All tenements and hotels having 25 or more rooms above the first story shall have 2 or more stairs connecting with ground floors.

Detroit, Mich.
Prohibited.

Duluth, Minn.
Prohibited, must be kept in repair.

Indianapolis, Ind.

Louisville, Ky.
Prohibited.

Lowell, Mass.
Prohibited.

Memphis, Tenn.
Prohibited.

Milwaukee, Wis.

Minneapolis, Minn.
Shall be free from obstructions. Shall not open into inner courts.

New Orleans, La.
Prohibited.

Omaha, Neb.
Must be free at all times from obstructions. If in court there must be direct passageway along ground to street, yard or alley.

Paterson, N. J.
Prohibited.

Pennsylvania (Model Law).
No obstruction of any kind shall be placed on any part of the fire escape; it shall be the duty of any authorized inspector to confiscate property found on such fire escape.

Pittsburgh, Pa.

Portland, Ore.
All fire escapes shall be placed on street front or have unobstructed access to street or alley along ground. All fire escapes shall be kept free from all encumbrances, at all times.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Prohibited.

St. Paul, Minn.
Prohibited.

Seattle, Wash.
Prohibited.

Toledo, Ohio
Prohibited..

Toronto, Can.
Prohibited.

Washington, D. C.
Prohibited.

Worcester, Mass.

FIRE PROVISIONS—Stairs, number of

Baltimore, Md.
Every tenement must have 1 stairway from roof to 1st floor. Tenement over 6 stories must have 2 such stairways.

Boston, Mass.

Bridgeport, Conn.
Tenement houses occupied by 2 or more families to have 2 or more stairs reaching from entrance floor to top story. Not to be less than 3 ft. wide. If more than 16 rooms above the second story, width of stairs shall be increased 6 inches for every additional 16 rooms.

Calgary, Can.
The number of stairs shall be in accordance with any requirements of the Dept. of Bldgs.

Cambridge, Mass.
Every floor above 1st shall have two exits leading directly to street, placed as far apart as practicable. At least one shall continue to the roof of flat.

Chicago, Ill.
Every tenement must have 2 flights stairs. Non-fire proof tenement of over 80 rooms must have additional fire escape for each additional 80 rooms or fraction thereof. In fire proof tenement of more than 120 rooms an additional flight for each additional 120 rooms or fraction.

Cincinnati, Ohio
Elaborate details; as good as Model Law.

Columbus, Ohio

Dayton, Ohio
Stairs shall be in proportion to 3 ft. in width plus 1 ft. for hindrance to 100 persons to be accommodated. Each room or apartment shall have access to at least 2 separate and distinct means of egress. When such means of egress are placed more than 100 ft. apart additional means shall be provided.

Denver, Colo.

Detroit, Mich.
Buildings over 2 stories and basement high shall have 2 separate stairs 3 feet wide with 6 inches increase for each additional 1000 sq. ft. over 2000 sq. ft. ground floor area, and increase of 9 inches for every story above 3. When combined width of stairways exceeds 9 ft. there shall be 3 stairways. In tenement with over 100 rooms above 1st story there shall be an additional stairway for every added 100 rooms or fraction.

Duluth, Minn.
Every tenement, with 2 or more families above 1st story shall have 2 flights of stairs from ground to top floor, 3½ ft. wide.

Indianapolis, Ind.
Flats and apartment houses must have at least two stairways.

Louisville, Ky.

Lowell, Mass.
Every tenement house over 2 stories high shall have 2 distinct and separate stairs.

Memphis, Tenn.
All bldgs. above 2nd story for 10 or more persons shall have 2 stairways. To be increased 6 inches in width for each 50 persons in excess of 100 until number reaches 350 or more then there shall be 3 stairways.

Milwaukee, Wis.

Minneapolis, Minn.

New Orleans, La.
Every tenement shall have at least 1 stairway from entrance floor to roof. Tenement with more than 50 rooms above 1st floor shall have an additional stairway for every additional 50 rooms or fraction.

Omaha, Neb.
Every tenement must have at least 2 stairways leading from entrance floor to top story. Stairs must be at least 3 ft. wide. Nonnreproof houses with 80 rooms must have additional stairs for every additional 80 rooms.

Paterson, N. J.

Pennsylvania (Model Law).
Tenements, etc., shall have at least 2 stairways, one of which shall extend from the ground to the bulkhead and the other from the ground to top story. In such buildings containing over 36 apartments there shall be an additional stairway for every 36 apartments or fraction thereof. All such additions may be tower fire escapes.

Pittsburgh, Pa.
Tenement over 2 stories must have stairway accessible from each apartment. Stairs in hallways must be 3 ft. in width for tenement with less than 15 rooms: from 15 to 25 rooms not less than 3½ ft. in width: or 25 or more rooms stairs shall be 4 ft. in width.

Portland, Ore.

Providence, R. I.

Richmond, Va.
At least 1 flight of hall stairs shall extend to roof and end in bulkhead. Each bldg. shall have one continuous line of stairs for each 5000 ft. of lot covered, and all bldgs. covering between 2500 and 5000 ft. shall have 2 stairs.

Rochester, N. Y.
Every tenement house shall have one flight of stairs reaching from entrance floor to roof. Non-fireproof buildings must have additional flight for every additional 26 apartments. Fire proof tenements must have extra flight for every additional 36 apartments.

St. Paul, Minn.
Every tenement more than 2 stories high shall have at least 2 separate and distinct stairways.

Seattle, Wash.
A 2 story tenement shall have 1 stairway; 3 stories 1 stairway and 1 fire escape. Tnmt. more than 3 stories high must have sufficient means of egress to satisfy Supt. of Bldg. Each suite shall have 2 means of exit without passing any open stairway, elevator shaft or light shaft.

Toledo, Ohio

Toronto, Can.
Stairs in tnmts. with 15-25 rooms above 1st floor shall be 4 ft. wide. Tnmts. with more than 25 rooms above 1st floor shall have two stairways 3½ ft. wide situated at opposite ends of bldg.

Washington, D. C.
No stairway shall be less than 4 ft. in width. Common halls 150 ft. in length furnishing egress for more than 10 apts. of 3 rooms each must have stairs at each end.

Worcester, Mass.
Every apartment shall have direct access to two stairways leading to the ground.

FIRE PROVISIONS—Closets under stairs

Baltimore, Md.
Prohibited under 1st story stairs, in non-fire proof tenement.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Prohibited under wooden stairways except in one or two family dwellings.

Chicago, Ill.

Cincinnati, Ohio
Prohibited.

Columbus, Ohio
Prohibited.

Dayton, Ohio
Prohibited.

Denver, Colo.

Detroit, Mich.
Closets are prohibited under 1st story stairway unless building is fire proof.

Duluth, Minn.
Closets under stairs to second story are prohibited.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Prohibited.

Milwaukee, Wis.

Minneapolis, Minn.
Prohibited.

New Orleans, La.
Closets under stairs leading from cellar to 1st floor are prohibited.

Omaha, Neb.

Paterson, N. J.
Prohibited.

Pennsylvania (Model Law).
Prohibited.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

No closet with a pitch of less than 5 ft. shall be erected under staircase. 1st staircase may be enclosed for coat closet or toilet room.

Rochester, N. Y.

Prohibited in non-fire proof houses.

St. Paul, Minn.

No closet shall be constructed underneath the staircase of any story, but the space thereunder shall be left entirely open and kept from incumbrance, but this shall not prohibit the enclosing without openings the under portion of the first story staircase from the foot of same to a point where the height from the floor line to the soffit of the staircase shall not exceed five feet.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

Prohibited.

FIRE PROVISIONS—Winding stairs

Baltimore, Md.

Boston, Mass.

Treads of winders on wall side shall be 10 inches wide.

Bridgeport, Conn.

Prohibited.

Calgary, Can.

Winders must be 7 inches wide.

Cambridge, Mass.

Prohibited.

Chicago, Ill.

For winding stairs treads must be 9½ inches wide and 18 inches from strings on well side.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Prohibited.

Detroit, Mich.

Prohibited.

Duluth, Minn.

Prohibited.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Prohibited.

Memphis, Tenn.

Prohibited.

Milwaukee, Wis.

Minneapolis, Minn.

Prohibited.

New Orleans, La.

Interior circular fire escapes shall extend from top floor to basement. Open into court or yard and must be 4½ ft. in diameter.

Omaha, Neb.

Prohibited.

Paterson, N. J.

Pennsylvania (Model Law).

Prohibited.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.

Seattle, Wash.

Winders shall meet approval of Supt. of Bldgs. Width shall be measured 15 inches from narrow end. Narrow end must be 5 inches wide. Wide end not to exceed 30 inches.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

FIRE PROVISIONS—Fire proof stairs

Baltimore, Md.

Outside stairway shall always be fire proof. Inside stairway of non-fire proof tenement over 2 stories high shall be fire proof.

Boston, Mass.

Main staircase of tenements must be fire proof material extending from entrance floor to roof. Must not extend below 1st floor. Shall be enclosed in fire proof walls. Openings shall have self closing metal doors.

Bridgeport, Conn.

In buildings exceeding 3 stories in height the stair halls shall be enclosed in fire proof material.

Calgary, Can.

Apts. over 2 stories high shall have stairways of fire proof construction.

Cambridge, Mass.

In multiple dwellings exceeding 2 stories in height stairway shall be surrounded by incumbustible material. Openings to have fireproof doors.

Chicago, Ill.

Stairs in tenements 3 stories and basement in height must be fire proof.

Cincinnati, Ohio

Columbus, Ohio

In non-fire proof tenement houses 3 stories high, the stairs and stair halls shall be constructed of fire proof material.

Dayton, Ohio

All stairs in non-fire proof buildings shall be enclosed in fireproof walls and ceilings.

Denver, Colo.

Stairs in semi-fire proof, composite or mill constructed bldgs. shall be of fire proof material.

Detroit, Mich.

Tenement with ground floor of 1500 sq. ft. or over 3 stories and basement high must have one story enclosed in fire proof shaft. Over 5 stories, one stairway fire proof.

Duluth, Minn.

In non-fire proof tenements 3 stories high stairs and halls shall be of fire proof material throughout.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Stairs and stair hallways in nonfireproof houses must be enclosed in fire proof material.

Milwaukee, Wis.

In tenements 4 stories or more in height the stairs shall be constructed of fire proof material throughout.

Minneapolis, Minn.

In multiple dwellings, exceeding 2 stories in height occupied by more than 2 families on any floor, one stairway must be constructed of fire proof material.

New Orleans, La.

Omaha, Neb.

Stairs and stair halls in all new apts. must be of incombustible material, except steps and handrails. In nonfireproof bldgs. stair halls must be enclosed in walls of solid masonry.

Paterson, N. J.

In non-fire proof tenement houses 4 stories and basement and over, the stair case halls shall be of fire proof material and shall have a fire proof hallway connecting with the street.

Pennsylvania (Model Law).

Stairways and walls and ceilings around stairways shall be of fire resistive material.

Pittsburgh, Pa.

Portland, Ore.

The stairs and stair halls in all tenements over 4 stories high shall be constructed of fire proof material throughout.

Providence, R. I.

Stairs shall be fire proof throughout or as approved by inspector.

Richmond, Va.

In nonfireproof apartments 4 stories and basement, or over, the **stairways** must be enclosed in fire proof walls. In fire proof houses the stairs shall be of fire proof material.

Rochester, N. Y.

Inside fire stairways shall be constructed entirely of fireproof material enclosed with walls and shall connect with passageway leading direct to street. Shall have standard fire doors.

St. Paul, Minn.

Tenements shall have outside fire proof entrance.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Every non-fire proof tnmt, over 3 stories and bsmt. in height shall have fire proof stairs.

Washington, D. C.

Bldgs. 3 stories in height with more than one apt. on any floor must have fire proof stairs.

Worcester, Mass.

FIRE PROVISIONS—Cellar stairs

Baltimore, Md.

This inside stairway to basement shall be enclosed by brick walls and self closing doors.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Stairways must be enclosed in fire proof partitions with self closing doors.

Cincinnati, Ohio

May be located inside if enclosed in fire proof material. Openings to have self closing fire proof doors a ttop and bottom.

Columbus, Ohio

In non-fire proof bldgs. exceeding 2 stories, cellar stairs to be enclosed with F. P. walls; have self closing doors top and bottom.

Dayton, Ohio

Denver, Colo.

Such stairs not to be located under stairs extending above 1st story unless enclosed in fire proof wall and has fire doors in basement.

Detroit, Mich.

Basement shall have 1 stairway, 3½ ft. wide, leading directly (to street, if used for living and sleeping) to street, alley or floor above. Inside stairs must be enclosed by brick walls.

Duluth, Minn.

In non-fire proof tenement houses over 2 stories in height, inside cellar stairs shall be enclosed with fire proof walls and have self closing doors.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Shall be enclosed in fire proof walls and provided with selfclosing doors at bottom.

Milwaukee, Wis.

Minneapolis, Minn.

In multiple dwlgs. must be fire proof construction and have selfclosing doors top and bottom. Brick walls 8 inches.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Shall be enclosed in fire proof walls. Self closing doors at top and bottom.

Pennsylvania (Model Law).

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Such stairs leading to story above prohibited in no-fireproof houses, but not in fireproof houses.

St. Paul, Minn.

The stairs from the cellar or lowest story to the floor next above when placed within any apartment house or tenement house, shall be located, when practical, to the rear of the staircase leading from the first story to the upper story, and in all cases be enclosed with brick or stone walls, and such stairway shall be provided with self-closing fireproof doors at the top and bottom of said flight of stairs.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Cellar stairs must terminate in fire proof compartment.

Worcester, Mass.

Must not be under stairs leading from 1st floor to floors above. Brick or masonry walls with self closing fire doors.

FIRE PROVISIONS—Cellar entrance

Baltimore, Md.
Outside stairway shall be fire proof.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Outside stairways except in frame buildings shall be fire proof.

Duluth, Minn.
Tenement over 3 stories high shall have outside cella entrance.

Indianapolis, Ind.

Lonisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
In multiple dwellings there shall be outside entrance.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
There shall be an entrance to every cellar and basement from the outside.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Outside in non-fire proof houses.

St. Paul, Minn.
Whenever the basement or cellar of a building is used for a sales room or for manufacturing purposes, it shall have a staircase at least three feet wide leading direct to the street or outside, for every five thousand square feet of lot area, or part thereof, covered by the same and shall have at least one continuous line of stairs for each five thousand square feet of lot area, or part thereof, covered in excess of that required for five thousand square feet or area.
Whenever it may be practicable to furnish a number of outside entrances as required by this Code, stairways shall be constructed leading to the first floor as near as possible to the outside entrance as in the opinion of the Commissioner of Public Works will afford an adequate exit from said basement.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Must be an entrance from yard or court into every cellar or basement.

FIRE PROVISIONS—Fire stops

Baltimore, Md.

Boston, Mass.

Bridgeport, Conn.
In apartment houses the partitions between apts. where not separated by halls shall be of fire proof material.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio
Where houses are built in form of double houses, terraces or rows there shall be a fire proof wall separating them. Provided that this shall not apply to double frame houses.

Dayton, Ohio
Hotels and tenements built in connection with other buildings shall be separated from them by standard fire walls. Hotels and tenements of non-fire proof construction shall be subdivided by standard fire proof walls into floor areas of not more than 5000 sq. ft. each.

Denver, Colo.

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.
All buildings of more than 3 flats or apartments shall have division walls of brick or other non-combustible material.

Lonisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Each room or suite of rooms shall be separated from other apartments of the bldg. by a fire proof wall at least 13 inches thick.

Milwaukee, Wis.

Minneapolis, Minn.

New Orleans, La.

Omaha, Neb.
In every nonfireproof house there shall be dividing wall of solid masonry extending from ground to roof between each set of apts.

Paterson, N. J.

Pennsylvania (Model Law).
In tenements of other than fire resistive construction, in all walls where wooden furring is used, the 2 courses of brick below the top of the floor beam shall project one and one-half inches beyond the furring, and shall be levelled off with plaster to the top of the beams after beams are in place to form a fire stop. If concerte or other materials are used for walls an equivalent projection shall be provided.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Partitions between apartments, not separated by halls or stairways shall be made of incombustible material.

St. Paul, Minn.
All non-fire-proof apartment houses or tenement houses hereafter erected, 3 stories and basement in height, but not exceeding 50 ft. shall have exterior or enclosing walls composed of brick, stone, concrete or incombustible material.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

FIRE PROVISIONS—Scuttles and bulkheads

Baltimore, Md.

Boston, Mass.
Tenements shall have fire proof bulkheads with fire proof covering, and stairs leading to it. Tenements under 65 ft. may have bulkhead of wood, covered with metal on outside and plaster on metal lath on inside, having covered metal door. All other tenements shall have bulkhead or scuttle located in hall and shall not be locked at any time.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Must be kept unlocked.

Chicago, Ill.

Cincinnati, Ohio
Existing buildings shall be provided with a ladder and scuttle door to the roof at the head of the stairs, or there shall be posted at the head of the stairs a direction to the ladder.

Columbus, Ohio
Must be provided in all tenements over 2 stories. Must be covered on outside with metal and provided with stairs or stationary ladder; located in hall; shall not be kept locked.

Dayton, Ohio
Shall be provided in buildings over 25 ft. high. Shall be covered on outside with metal, located in the hall, shall have stairs or ladder leading to them, and shall not be provided with locks.

Denver, Colo.
All bldgs. over one story shall have scuttles in roof covered with incombustible materials. Ladders of iron must connect them with floors below. The lid of a scuttle must not be locked.

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.
Must be provided on all flat roof buildings of more than 2 stories in height. Must have stairs or stationary ladders which must be kept free from obstruction.

Louisville, Ky.
Must be accessible to tenants and must not be locked.

Lowell, Mass.
Shall be provided in buildings 2 or more stories in height having flat roofs. Must be provided with ladders or stairs and kept unlocked.

Memphis, Tenn.
At least one flight of stairs shall reach to roof and there have exit. Scuttles and bulkheads must be made of fire proof material and open outwardly.

Milwaukee, Wis.

Minneapolis, Minn.
Every flat roofed multiple dwelling more than one story or occupied by more than 2 families on a floor shall have in roof buldhead or scuttle not less than 2x3 ft. If more than 2 stories, shall have ladders or stairs leading to buldheads or scuttles. Shall not be located in closet or room.

New Orleans, La.

Omaha, Neb.
There shall be in the roof of every new tenement at least one bulkhead or scuttle, fire proof or covered with fire proof material with stairs or ladder leading to them. No scuttle or bulkhead shall have any lock on it.

Paterson, N. J.
At least one flight of stairs shall connect with scuttle or bulkhead. Scuttles or bulkheads shall not be kept locked.

Pennsylvania (Model Law).
In tenements, ect., there shall be at least one bulkhead located in the ceiling of the common hall of the top story. Its size shall be not less than 24x30 inches. Access thereto shall be by means of stairs. It shall not have any lock on it.

Pittsburgh, Pa.

Portland, Ore.
Must be provided in buildings over one story high. Must be located in hall, be constructed of fire proof material. Scuttles must be kept free from obstructions.

Providence, R. I.

Richmond, Va.
Must be constructed of fire proof material.

Rochester, N. Y.
Must be provided in all tenements of more than 2 stories in height. Must be of fire proof material in fireproof buildings and may be of wood in non-fireproof buildings.

St. Paul, Minn.
All buildings over 2 stories in height shall have scuttles in roof, covered with incombustible material and ladder or stairs permanently attached leading thereto from the floor below—not less than 20x30 feet, must not be locked.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Apartment houses must be provided with bulkheads or scuttles to be determined by class of apartment. Bulkheads must have stairs with rails leading to roof. Scuttles must be in hall and not in any room. Doors on scuttles or bulkheads must never be locked.

FIRE PROVISIONS—Shafts

Baltimore, Md.
Construction of shafts is subject to approval of Inspector of Buildings.

Boston, Mass.
Shafts and dumb waiters in tenements more than 3 stories high must be enclosed in fireproof material and provided with fire proof self closing door.

Bridgeport, Conn.
Walls of shafts, dumb waiters, etc., must be of fire proof material.

Calgary, Can.

Cambridge, Mass.
Vent shafts and shaft ways shall be enclosed if they extend through more than 2 stories. Must be fitted with approved fire doors and fire windows.

Chicago, Ill.
Shafts must be fireproof. There must be wall of solid masonry from ground to roof between apartments.

Cincinnati, Ohio
Shall be covered with fire proof material in non-fire proof buildings.

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
See "Fire proof stairs."

Duluth, Minn.
Shafts from bakeries must be of brick at least 8 inches thick.

Memphis, Tenn.
Dumb waiter shafts in fire proof bldgs. can be enclosed with fire proof partition with fire proof doors. Openings must have doors kept closed when not in use.

Milwaukee, Wis.
Shall be constructed of fire proof material throughout.

Minneapolis, Minn.
In multiple dwellings shafts, elevators or dumb waiters shall be constructed of fire proof material. Dumb waiters must have fire proof doors at openings.

New Orleans, La.
Shaft shall be fire proof throughout with standard fire doors at all openings at each story.

Omaha, Neb.
Shall be constructed of fire proof material.

Paterson, N. J.
Shafts and dumb waiters shall be enclosed in fire proof material.

Pennsylvania (Model Law).
Shall be enclosed in walls of fire resistive material and there shall be no openings except for doors and skylights.

Pittsburgh, Pa.

Portland, Ore.
All shafts and clothes chutes shall be enclosed on four sides. Walls plastered on metal lath or lined with metal.

Providence, R. I.
All shafts in non-fire proof buildings shall be enclosed in brick or other fire proof material approved by Building Inspector.

Richmond, Va.
Shafts and dumb waiters shall be enclosed with fire proof material.

Rochester, N. Y.

St. Paul, Minn.
See "Halls and Stair Partitions."

Seattle, Wash.

Toledo, Ohio

Toronto, Can.
Walls of shafts shall be of brick or other fire proof construction throughout.

Washington, D. C.
Elevator and light shafts shall be fire proof as specified in "Fire Proof Stairs."

Worcester, Mass.
Shafts must be constructed of masonry.

FIRE PROVISIONS—Bakeries and dangerous businesses

Baltimore, Md.

Boston, Mass.
Prohibited in non-fire proof tenements unless rooms where such business is carried on are enclosed in fire proof walls and ceiling. No opening between rooms and other parts of tenement.

Bridgeport, Conn.

Calgary, Can.
No person shall conduct any place for boiling soap, running candles, melting tallow or any dangerous business without permit from Supt. of Bldgs.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio
Shall not be maintained in non-fire proof tenement house unless such room where it is carried on is enclosed in fire proof walls and no openings shall connect with any other part of the tenement.

Dayton, Ohio
Rooms used for such businesses shall be enclosed by standard fire proof walls and openings shall be covered with fire proof doors.

Denver, Colo.

Detroit, Mich.

Duluth, Minn.
Bakeries are prohibited except in fire proof tenement. Openings from places where paints, oils, spirituous liquors or drugs are kept into hall or stairway used by tenants are prohibited.

Indianapolis, Ind.

Louisville, Ky.
Prohibited in tenement houses of nonfire-proof construction.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Prohibited in multiple dwellings.

New Orleans, La.
Bakeries prohibited except in fire proof tenements, unless ceiling and walls are made fire proof.

Omaha, Neb.

Paterson, N. J.
Prohibited in non-fire proof tenements unless room in which business is carried on is enclosed in fire proof walls and all openings are provided with standard fire doors.

Pennsylvania (Model Law).
Shops dealing in inflammable materials are prohibited. Shops dealing in materials that are not easily inflammable will be permitted provided there is no communication between them and other parts of building. Bakeries with dumb waiters will be permitted in buildings of fire resistive material provided the openings are covered with fire proof doors.

Pittsburgh, Pa.
No horse, cow, pig, sheep, goat or poultry shall be kept. Cannot be used for dangerous or combustible articles.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Prohibited in non-fireproof tenement houses.

St. Paul, Minn.
No bakery in non-fire proof tenement unless ceiling and sides are fire proof. Opening from places where paint, oil or spirituous liquors are stored shall be protected by fire proof doors or closed up solidly.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.
Permit must be secured from Committee on Property before bakers' ovens may be installed.

Washington, D. C.

Worcester, Mass.
Shall not be maintained in non-fire proof houses unless such bakery or other business is made safe by fire proof material around it. There shall be no openings between such place and any other part of building.

YARDS

Baltimore, Md.
Interior lots. Required at rear of every tenement and must extend across entire lot free from ground to sky. Minimum width 12 ft. Increased 1 ft. for every additional 12 ft.ft. above 60 ft. in height of tenement.
Corner lot. Lots 100 ft. in depth, minimum 10 ft. Lots less than 100 ft. in depth 10% of depth of lot, but never less than 5 ft.

Boston, Mass.
Yard shall extend full width of lot and unobstructed from ground to sky. Corner lots, minimum depth 6 ft. Corner lots over 25 ft. wide, 12 ft., other lots, 12 ft. If the building is in excess of 50 ft. high, the yard shall be increased in depth one foot for every additional 10 ft. Yard not required when (1) tenement abuts on railway, cemetery or park. (2) When surrounded on 2 sides by streets or alleys more than 15 ft. wide (3) Located on lot which runs through block, etc. (See p. 72 of Building Law.)

Bridgeport, Conn.

Calgary, Can.
At the rear of every lot there should be a yard open and unobstructed 10 ft. wide. Shall be increased 10% of lot area for every story above.

Cambridge, Mass.
Interior lots. For tenements 2 stories high yard shall be 10 ft. deep. For each additional story the depth of the yard shall be increased 2 ft. The depth of a yard on a corner lot may be reduced to one half that of inner lots for a length not exceeding 50 ft. Exceptions the same as in Benton Code.

Chicago, Ill.
Interior lots. Every tenement unless abutting on alley must have yard at rear minimum 10 percent of lot. Increased 1 percent in area for each story over three. Minimum 10 ft.
Corner Lots. Minimum 8 percent of area of lot. Increased 1 percent for each story over three. Minimum 10 ft.

Cincinnati, Ohio
Yards, extending across lot, and 10 ft. deep required for interior lots. Side yards shall not be less than 4 ft. When buildings on side yards are from 24 to 36 ft. high, side yards shall be 5 ft. wide. For every 12 ft. in height above 36, ½ ft. shall be added to side yard.

Columbus, Ohio
Every tenement shall be provided with rear yard the entire width of the lot and 18 ft. deep on inner lots and 15 ft. deep on corner lots.

Dayton, Ohio
Width—across lot.
Depth.
Corner lot minimum 10 ft.
Other lots minimum 15 ft.
When buildings are over 2 stories, 2 ft. shall be added to yard for each additional story. If tenement occupies 100 per cent of lot a roof garden shall be provided in lieu of a yard.

Denver, Colo.

Detroit, Mich.
Interior lots. Tenement must front on a street 40 ft. wide or an alley 30 ft. wide. or else be set back distance so as to make the open area in front of tenement equal to these distances. Tenement must have rear yard 15 ft. with 1 ft. added for each additional 10 ft. in height for building over 25 ft.
Corner lot 80 percent.

Duluth, Minn.

Indianapolis, Ind.
Shall extend across entire lot. Corner lot yards shall be 15 ft deep; interior lots shall be 25 ft. deep unless depth of lot is less than 100 ft. then yard shall be 25% of yard depth, but never less than 10 ft. If the house exceeds 3 stories in height, the depth shall be increased 3 ft. for each story over 3. Side yards shall not be less than 4 ft. in width.

Louisville, Ky.
Where tenement is 3 stories in height, yard shall be 15 ft. deep and shall be increased 1 ft. for each additional story; decreased 1 ft. for every story less than 3 stories in height; but it shall never be less than 12 ft. in depth. If there are no windows in the rear of a tenement no yard is required.

Lowell, Mass.

Memphis, Tenn.
Shall be 10 ft. deep for 4 story bldgs. May be decreased 1 ft. in depth for every story less than 4; shall be increased ½ ft. for every story more than 4. Corner lots shall have yards 5 ft. deep. Shall not be decreased or need not be increased for bldgs. of different heights.

Milwaukee, Wis.
Shall extend across the entire width of lot and shall be ¼ the height of the tenement, but never less than 10 ft. measured to center of alley if there is one. For corner lots, yards must be 10 ft. deep unless lots are less than 100 ft. then they shall be 10% of lot.

Minneapolis, Minn.
Shall extend across entire lot. In no case shall a yard be less than 15 ft. deep. For a 3 story bldg. yard shall be 25% of lot; for every story above this the depth of the yard shall increase 5%. Side yards for 1 story dwellings shall be not less than 4 ft. to side lot line; 2 stories 5 ft.; 3 stories, 7 ft, for each story above three, space shall increase 2 ft. in width.

New Orleans, La.
Interior lots. Every tenement 50 ft. or less in height shall have a yard not less than 12 ft. in every part. To be increased 1 ft. for every additional 10 ft. in height.

YARDS—Cont'd

Corner lots. Not less than 6 ft. in every part for building 50 ft. in height. That portion of lot in excess of 30 ft. shall have a yard 12 ft. deep to be increased in depth as provided for in interior lots.

Omaha, Neb.

Shall be a yard at least 10 ft. wide, unless the rear of lot abuts on alley, in which case the rear line of bldg. shall be not less than 16 ft. from opposite side of alley. Yard shall be 8% of area of lot on corner lots and 10% on other lots. Yard shall be increased 1% of area for every story above three.

Paterson, N. J.

Yard shall extend across lot and shall not be less than 14 ft. on inner lots. On corner lots it shall not be less than 10 ft. deep.

Pennsylvania (Model Law).

The building shall be so located on the lot so that there shall be a yard at least 8 feet in depth.

Pittsburgh, Pa.

Interior lots. Yard must be 20 percent of area and 8 ft. in width.

Corner lots. 10 percent of area and 8 ft. in width.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Corner lots—yard must be 10 feet in depth, unless lot is less than 100 feet deep then yard may be 25 per cent of lot, but never less than 5 feet. That part in excess of 50 feet must conform to requirements for interior yards.

Interior lots—minimum of 12 feet for a building 60 feet in height. For every additional 12 feet in height it shall be increased 1 foot in depth.

St. Paul, Minn.

Interior lots. Yards must be 10 ft. deep for 4 stories on inside lot and extend across entire lot. Increased 6 inches for every added story. Decreased 1 ft. for every story less than 4.

Corner lots. Must be 5 ft. for full width of lot.

Seattle, Wash.

Interior lots. Yards shall not be less than one-eighth of depth of lots. Minimum 5 ft. Shall be increased 1% of area of lot for each story above 3.

Corner lots. Yard shall not be less than 1-16 of depth of lot. Need not be increased with height of building.

Toledo, Ohio

Toronto, Can.

Every tenement shall have a yard 500 sq. ft. in area, for each suite of apts. on the floor having the greatest number of suites.

Washington, D. C.

Interior lots. Yards must be 10 ft. in depth for building 25 ft. high, or 5 ft. where 5 ft. side yard exists. Three inches increase for each additional foot in height of building. On lot over 100 ft. deep without side yard, 6 inch increase for each foot, except that ½ of street or alley adjacent to yard may be included in same with minimum of 5 feet unobstructed.

Corner lots. Corner lots less than 75 feet deep and not over 50 ft. wide need no yard.

Worcester, Mass.

Shall be 12 ft. deep for houses 3 stories in height. Depth shall be increased 3 ft. for each additional story.

PER CENT OF LOT OCCUPIED

Baltimore, Md.

Corner lot 90%.
Interior lot 70%.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Corner lot, above 1st story, 85 per cent. Street on three sides 90 percent. Interior lot, 75 percent.

Cincinnati, Ohio

Corner lots for first 20 ft. may be 100 per cent occupied. Inside lots not more than 70 per cent may be occupied, except when area of lot is less than 3000 sq. ft. 75 per cent may be occupied; when less than 2000 sq. ft. 80 per cent may be occupied.

Columbus, Ohio

Corner lots with streets on 3 sides,	75%
Other corner lots	80%
Inner lots	60%

Measurements shall be taken from ground level.

Dayton, Ohio

No building shall occupy such percent of the lot as will hinder its lighting and ventilation.

Denver, Colo.

Detroit, Mich.

Corner lots same as above.
Interior lots 70 percent.

Duluth, Minn.

Indianapolis, Ind.

Corner lots.

Streets on 3 sides	90%
Other corner lots	85%
Inner lots	65%

Louisville, Ky.

A minimum of 80% on corner lots; and of 70% on other lots. The space that the house sets back on the lot shall be counted as occupied.

Lowell, Mass.

Memphis, Tenn.

Same as Model Law.

Milwaukee, Wis.

90% of corner lot.
75% of other lots.

Minneapolis, Minn.

Corner lots with street on 3 sides, 90%. Other corner lots, 80%. Interior lots 65%.

New Orleans, La.

Omaha, Neb.

Corner lots 85%. Fire proof bldgs. corner lots 90%. Corner lots with streets on 3 sides 90%. Other lots 75%.

Paterson, N. J.

Not more than 90% of corner lot or more than 70% of any other lot.

Pennsylvania (Model Law).

Not more than 90 per cent of a corner lot and not more than 70 per cent of inner lot. Measurements shall be taken from the ground and the unoccupied percentage shall be free from the ground to the sky.

Pittsburgh, Pa.

Corner lots, streets 20 ft. wide 90 percent.

Corner lots, street not less than 20 ft. wide on three sides. 100 percent.

Interior lot. 80 percent.

Portland, Ore.

Buildings shall be so placed as to receive natural light and ventilation.

Providence, R. I.

Corner lot 95 percent.
Interior lot 80 per cent.

Richmond, Va.

Rochester, N. Y.

Same as Model Law, except it does not apply to tenements running thru from one street to another if such lot is less than 100 feet deep.

St. Paul, Minn.

Corner lot 90%.
Interior lot 70%.

Seattle, Wash.

Fire proof bldgs. used for tnmts. or apts. above 1st story and for other purposes below may have cellar and bsmt. covering the entire lot and 1st story covering the entire width of lot if the lower stories are supplied with light, air and ventilation. No 2nd or 3rd story of any bldg. shall cover a greater % than as follows:

Corner lot on 2 streets 83%; Corner lot on 2 streets and alley 85%; Corner lot on 3 streets 87%; Lot surrounded by thoroughfares 100%; Interior lot on one street 73%; Interior lot on one street and an alley, 75%; Interior lot on 2 streets 77%.

Toledo, Ohio

Toronto, Can.

Bldgs. on business streets may cover the entire area of lot for such stories as are used for business purposes only.

Washington, D. C.

Corner lot not less than 75 ft. deep and not over 50 ft. wide, 100%. Triangular or irregular shaped lot extending from street to street 100%. Corner lot 90%; interior lot 75%.

Worcester, Mass.

Corner lots 80 per cent.
Others 70 per cent.

REAR TENEMENTS

Baltimore, Md.

Rear tenements forbidden unless rear of lot abuts on street 40 ft. wide.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Forbidden except on corner lots.

Cincinnati, Ohio

Columbus, Ohio

Must front on street.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.

Duluth, Minn.

Tenement must have one side fronting on street.

Indianapolis, Ind.

Prohibited unless such tenement abutts on two streets and located on outside corner of lot.

Louisville, Ky.

Prohibited.

Lowell, Mass.

Memphis, Tenn.

Prohibited unless six foot sidewalk is left between bldg. and alley curb.

Milwaukee, Wis.

Permitted if there is a yard of 15 ft. between it and rear of other tenements.

Minneapolis, Minn.

Prohibited.

New Orleans, La.

Omaha, Neb.

When a tenement house stands on a lot other than a corner lot, no other bldg. shall be placed in front or rear of it, unless the minimum distance between such buildings be 10 ft. If they are one story building 5 ft. shall be added to this space for each additional story.

Paterson, N. J.

Prohibited.

Pennsylvania (Model Law).

May be erected, provided (1) lot on which it stands is bounded by a street on one side and an alley on the other not less than 20 feet in width. (2) That the distance of buildings on same lot shall be at least 16 feet. (3) The rear of such building having its principal entrance on the street shall not approach nearer the alley than 6 feet and where the principal entrance is on the alley the rear of such building shall not approach nearer the street than 16 feet.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Prohibited.

St. Paul, Minn.

Seattle, Wash.

No tenement may be built on the inside of a rear lot unless there is a straight passageway to the street equal in width to ⅕ of the width of the lot.

Toledo, Ohio

Toronto, Can.

No tenement shall be erected on any street, lane, alley or other place less than 40 ft. in width unless such street is a public highway.

Washington, D. C.

Bldg. on a court or alley cannot be higher than the distance from the opposite side of the open space on which it fronts. Tenement cannot be placed on any alley less than 30 ft. wide and not supplied with sewage, water mains and light.

Worcester, Mass.

Space between them and buildings on front of lot shall be twice the depth of yards.

HEIGHT

Baltimore, Md.

Height shall not exceed 1½ times width of street.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

No bldg. can be over 130 ft. in height.

Cambridge, Mass.

One story for each 10 ft. of street width, except for streets 40 ft. wide, which may have one story for 8 ft. of street width.

HEIGHT—Cont'd

Chicago, Ill.
Height shall not exceed one and one-half times the width of the street.

Cincinnati, Ohio

Columbus, Ohio
Shall not exceed width of widest street on which it stands unless it stands back at a distance that equals the excess height,

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Shall not exceed in height the width of the widest street on which it abuts, never higher than 100 ft. Does not apply to hotels.

Duluth, Minn.

Indianapolis, Ind.
Same as Model Law.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Shall be properly lighted by windows opening into outer air.

Milwaukee, Wis.

Minneapolis, Minn.
Shall not exceed the width of widest street upon which it abuts.
In no case shall it exceed 6 stories or more than 75 ft.

New Orleans, La.

Omaha, Neb.
Same as Model Law.

Paterson, N. J.
Shall not exceed by more than one-half the width of the widest street on which it abuts.

Pennsylvania (Model Law).
Shall not be more than one and one-half times as high as the widest street on which building faces; nor shall it be more than 5 stories high. In estimating the height the distance the building sets back from curb line may be added to the width of the street.

Pittsburgh, Pa.

Portland, Ore.
Shall not exceed two times the width of widest adjoining street. In no case shall any tenement exceed 120 ft.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Shall not exceed by more than one-fourth the width of the widest street on which it abuts, nor four times the average of its horizontal dimensions.

St. Paul, Minn.

Seattle, Wash.
No fire proof tnmt. shall exceed in height the width of the widest adjoining street plus 25 ft. and in no case 125 ft.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
On a business street the height of a bldg. shall not be more than the width of the street on which it fronts, increased by 20 ft. Never over 130 ft. except on the north side of Pennsylvania Ave. where the limit is 160 ft.

Worcester, Mass.
Same as Model Law.

HALL WINDOWS

Baltimore, Md.
Halls should have 18 sq. ft. of glass per floor. One window shall be 5½ ft. high.

Boston, Mass.
Same as Model Law; except in place of window at end of hall there may be windows along sides at intervals of 20 ft. There shall be skylights over stairwells.

Bridgeport, Conn.

Calgary, Can.
There must be a ventilating skylight at least 25 sq. ft. in area.

Cambridge, Mass.
Each hall shall have at least one window opening into street, yard, court or vent shaft.

Chicago, Ill.
Minimum window area per floor is 12 sq. ft

Cincinnati, Ohio
Must open on street, yard or court. There shall be not less than 12 sq. ft. Shall either have window at end or windows along side at intervals of 20 ft. Skylight may be substituted for windows if it provides adequate light and ventilation.

Columbus, Ohio
Same as Model Law.

Dayton, Ohio
Shall have window or skylight suitable to light the same.

Denver, Colo.

Detroit, Mich.
Each hall shall have 15 sq. ft. glass area. Skylight must have 20 sq. ft. glass. 100 sq. inch opening.

Duluth, Minn.
Halls must have 10 sq. ft. of glass per story.

Indianapolis, Ind.
Same as Model Law.

Louisville, Ky.
Shall have a window at end of hall or windows along sides at intervals of 20 ft. A skylight over each stair well.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.
At least one window must have 10 sq. ft. of glass area. In tnmts. 3 or more stories high, when halls on each floor are not provided with window a ventilating skylight shall be placed over each stairway.

Minneapolis, Minn.
Every hall shall have 1 window opening on st., yd., or ct. Such window shall be at end of hall parallel to halls' axis; or windows may be in side of hall at intervals of 20 ft. Any partition offset, shall be separately lighted, according to above requirements. One of such windows shall be 2½ x5 measured between stopheads. Skylight shall be required over each stair well.

New Orleans, La.
In every tenement hall there shall be 15 sq. ft. window area on each floor.

Omaha, Neb.

Paterson, N. J.
Shall have one window in end of hall or one window at intervals of 20 ft. along side of hall.

Pennsylvania (Model Law).
Every hall shall have at least one window opening on street, yard or court. Any part of hall shut off from the other part shall be deemed a separate hall and be provided with a separate window. 1 of such windows in each hall shall be at least 2 feet 6 inches high. Top story may have a ventilating skylight.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
In tenement over 3 stories high hall window must be 2½ ft. wide and 5 ft. high. If there is no window in hall opening directly to outer air sash doors shall be provided.

Seattle, Wash.
Every hall must have one window opening directly to the outer air or transoms with 15 sq. ft. of glass area.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Each hall shall have at least one window opening on street, yard or court. Any part shut off from main part shall be separately lighted. At least one window in each hall shall have 12½ sq. ft. of glass.

COURTS

Baltimore, Md.

Stories	Min. area of crt.	Min. width of crt.
2	100 sq. ft.	6 ft.
3	150 sq. ft.	7 ft.
4	225 sq. ft.	8 ft.
5	300 sq. ft.	9 ft.
6	350 sq. ft.	11 ft.
7	540 sq. ft.	13 ft.
8	750 sq. ft.	16 ft.
9	1,100 sq. ft.	20 ft.
10	1,600 sq. ft.	24 ft.

Outer Courts. See outer lot line courts and Inner Courts.

Boston, Mass.
Courts—Outer. No court shall be covered by roof or skylight. Shall be six feet wide for tenements of 50 ft. in height when measured from lot line; when located between wings it shall be 12 ft. wide for tenements 50 ft. in height. For each additional 10 ft. in height courts shall be increased 1 foot in width. Depth shall never exceed four times width.
Courts—Inner. Width of courts on inner lot line shall be 8 ft. measured from lot line; when enclosed on all 4 sides it shall be 16 ft. wide and shall be increased 1 ft. for every additional 10 ft. in height.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Courts, Inner. When an inner lot line minimum width shall be 7 ft. for first story and one additional foot for each story. Area shall be 150 sq. ft. for 1st story 50 sq. ft. for each additional story. When enclosed on all four sides, minimum width for 1st story shall be 12 ft.; 2 additional feet for each additional story. Minimum area shall be 200 sq. ft.; 100 sq. ft. additional for every additional story.
Courts, Outer. When an outer lot line it shall be 6 ft. wide for 1st story and 1 additional foot for every additional story. When located between wings it shall be 10 ft. wide for 2 story tenements and 2 additional feet for each additional story in height. May be less than minimum width required provided length is not greater than width.

Chicago, Ill.

Height of bldg.	Minimum width of court	Minimum area
1 story	6 feet	100 sq. ft.
2 stories	6 feet	120 sq. ft
3 stories	8 feet	160 sq. ft
4 stories	8 feet	160 sq. ft.
5 stories	12 feet	260 sq. ft.
6 stories	16 feet	400 sq. ft
7 stories	20 feet	625 sq. ft.
8 stories	24 feet	840 sq. ft.

Court shall have opening to street 2 ft. wide and 15 ft. high (except tenements on lots 25 ft. in width which can have lot line court of 50 sq. ft. if 2 stories, 60 sq. ft. if 3 stories high). (Except 3 story tenement which can have a 3 ft. wide continuous lot line passage open to sky if on a 25 ft. wide lot, and a 3½ ft. passage if on a lot 30 feet wide.)

Cincinnati, Ohio
Inner Courts. Minimum width, 8 ft. Length, 20 ft. Width shall be increased ½ ft. for every 12 ft. in height over 36.
Outer Courts. On lot line they shall have minimum width of 8 ft. and length of 2 ft. Width shall be increased ½ ft. for every additional 12 ft. in height over 36.

Columbus, Ohio
Inner Courts. Shall never be less than twice width of outer courts.
Outer Courts. For 2 story tenement not less than 10 ft. wide, width shall increase 2 ft. for each additional story. No court shall be covered by roof or skylight.

Dayton, Ohio
Inner Courts. Minimum width shall be 6 ft. for first 15 ft. in height. For each additional 5 ft. in neight the width shall be increased 1 ft. Area shall be 1½ times minimum width.
Outer Courts. Minimum width shall be 3 ft. for first 15 ft. and for each additional 5 ft. the width shall be increased 6 inches.

Denver, Colo.

Detroit, Mich.

Height of building.	Width of court.
1 story	5 feet
2 stories	6 feet
3 stories	7 feet

Shall increase two feet for every additional story above three. Length shall never be greater than five times width. No court shall be covered by skylight.
Inner courts shall never be less than twice the minimum width prescribed for outer court.
Otherwise same as out courts.

Duluth, Minn.

Indianapolis, Ind.
Outer Courts. Shall be open at top. For a two story building the minimum width shall be 10 ft. For each additional story the width shall increase 2 ft.
Inner Courts. Minimum width shall never be less than twice minimum of outer courts.

Louisville, Ky.
Courts, Outer. No court shall be covered with roof or skylight. Width shall never be less than minimum required for inner court.
Inner Courts. Minimum width, 10 ft. for 3 story bldgs.; for each additional story width shall be increased 1 ft. Minimum area 200 sq. ft. For every additional story an increase of 20 sq ft. is required.

Lowell, Mass.

Memphis, Tenn.
Court, Inner. When on lot line it shall have minimum width of 6 ft. and minimum area of 72 sq. ft. For every story over 4 stories the court shall increase ½ ft. in width and 1 ft. in length. May decrease ½ ft. for each story under 4 and 10 sq. ft. deducted from area. When enclosed on 4 sides the least dimension shall be 12 ft. For every story above 4 least dimension shall be increased 1 ft.
Courts, Outer. On lot line shall not be less than 4 ft. wide, for 4 story bldgs. For

every additional story width shall increase ½ ft. When located betw. wings minimum width shall be 8 ft. For 4 story bldg. ½ ft. increased for each additional story. May decrease 1 ft. for each story under 4.

Milwaukee, Wis.

Inner courts. Shall not be less than 10 ft. wide nor less than 190 sq. ft. in area for courts 2 stories in height; for every additional story the length and width shall be increased 1 ft. each.

Outer courts. Shall not be less than 3 ft. for 2 story bldg. Width shall increase 1 ft. for each add. story. When situated between wings of same bldg. it shall not be less than 8 ft. wide for 2 story bldg. For each additional story it shall be increased 1 ft.

Minneapolis, Minn.

Courts, Outer. No court shall be covered by roof or skylight. Lot line courts shall be measured to lot line. Width of a one story court shall be 10 ft. and shall increase 2 ft. for each additional story. The length shall never be greater than four times the width.

Inner Courts. Minimum width is the same as for outer courts. Area shall never be less than twice the square of the minimum width.

New Orleans, La.

Inner courts. Courts shall be 16 ft. wide and 256 sq. ft. in area. Width to be increased 2 ft. for every additional 10 ft. in height of building.

Outer Court. For tenement 50 ft. high court must be 12 ft. wide, increased 2 ft. for every additional 10 ft. in height of building.

Omaha, Neb.

Paterson, N. J.

Inner courts. When one side is on inner lot line. Minimum width shall be 8 ft. when enclosed on all sides it shall be 24 ft. For every increase of 12 ft. in height above 50 ft. the width of such courts shall be increased 1 ft. **Outer Courts.** Shall not be covered by roof or skylight. Minimum width when measured from lot line shall be 2 ft. 8 ft. for 4 story bldg. If the court is between windows its minimum width shall be 4 ft. If bldg. is over 65 ft. the width of court shall be increased 1 ft. for each 30 ft.

Pennsylvania (Model Law).

Courts inner.

Shall have a least dimension of not less than 16 feet.

Pittsburgh, Pa.

Inner courts shall be 10 ft. wide. Outer courts must be 10 ft. in width.

Portland, Ore.

Minimum width—6 feet.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Court—Inner. When on inner lot line minimum dimensions for 60 feet building shall be 12x24. For every 12 feet of increase or decrease in height ½ foot shall be added or subtracted. When enclosed on 4 sides the minimum width shall be 24 feet; for every 12 feet increase or decrease in height 1 foot shall be added or subtracted.

Courts—Outer. No court shall be covered. When on lot line court shall have minimum width of 6 feet for a building 60 feet high; For every 12 feet increase in height the court shall be increased ½ foot in width; for every 12 feet decrease in height court width may be decreased ½ foot. When located between wings—for a 60 foot building court shall be 12 feet wide; 1 foot shall be added or subtracted for 12 feet increase or decrease.

St. Paul, Minn.

Inner courts. Courts shall be not less than 6 ft. wide and 12 ft. long. Increased 6 inches for every story above 4.

Outer courts. Courts shall be not less than 4 ft. Increase 6 inches throughout entire height for every added story above 4.

Seattle, Wash.

Height of bldg.	Width of court.
1 story	5 ft.
2 stories	6 ft.
3 stories	7 ft.
4 stories	8 ft.
5 stories	9 ft.
6 stories	10 ft.

2 ft. increase in width for each added story above the 6th. Area of each story above the 3rd in non-fire proof tnmt. shall be 1% of lot area greater than area of courts of floor immediately below. Court when covered by skylight shall have width increased 25%. Outer Court. Width shall be 75% of width of "Interior Courts." Court shall not be longer than 5 times the width. Court when covered by skylight shall have the minimum width increased 25%.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Inner courts. For bldg. 25 ft. in height width of court must be at least 5 ft. and area 65 sq. ft. 3 inches added to each dimension for each foot of increased height.

Outer courts. Court 25 ft. in height for bldg. 25 ft. high shall be 4½ ft. in width; ¼ inch added for each additional foot of length. 1 inch for each additional foot of height.

Worcester, Mass.

Outer Courts. Minimum width shall be 9 ft. when on lot line. Others shall be double this. For each additional story above 3 the width shall be increased 1 ft. Length shall not be greater than 2 times length unless provided with intake.

Inner Courts. When on lot line minimum width shall be 7 ft. When enclosed on 4 sides it shall be double this. For each additional story above 3, width shall be increased 1 ft.

INTAKES

Baltimore, Md.

For tenement over 2 stories intake must be 2½ ft. by 6½ ft. If area of inner court of tenement exceeds 340 sq. ft. intake must be 5% of court area.

Boston, Mass.

Must be 3 ft. wide by 7 ft. high. Must open on street yard or alley.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Inner courts shall have at least one air intake, connecting bottom with street, yard, or alley; it shall be 3 ft. wide by 7 ft. high.

Chicago, Ill.

Must connect with street, alley, yard or court, and be at least 3 percent of size of vent shaft and at least 100 sq. inches in area.

Cincinnati, Ohio

Columbus, Ohio

Inner courts extending through two stories shall have horizontal air intake at bottom. It must be 3 ft. wide by 7 ft. high.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.

Courts extending more than 1 story shall have horizontal intake at bottom. It shall be 3 ft. wide and 7 ft. high and must communicate with street or yard.

Duluth, Minn.

Indianapolis, Ind.

Every inner court shall have 2 or more horizontal intakes at bottom. They shall not be less than 3 by 7. One shall open on court, yard, alley or street.

Louisville, Ky.

Inner courts shall be provided with horizonal intakes; it shall communicate with street, yard or alley and be not less than 35 ft. in area in cross section.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Inner courts shall have intake for fresh air leading from court or yard. It shall equal one thousandth of the cubic feet contained in court.

Minneapolis, Minn.

Inner courts shall have one or more horizontal air intakes at bottom. One shall lead directly to street, front or rear yard.

New Orleans, La.

In vent courts intake shall not be less than 4 sq. ft., in other inner courts not less than 3 ft. wide and 7 ft. high. Shall be approved by City Engineer.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).

Inner courts shall be connected directly with street, yard, alley or outer court by a ground passageway; it shall be at least 4 feet wide and 8 feet high and shall be kept free from obstructions of any kind. Bottoms shall be adequately drained and paved with cement or concrete.

Pittsburgh, Pa.

Intakes open into street or yard.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Inner courts and vent shafts shall have such access as will enable them to be cleaned out.

St. Paul, Minn.

Seattle, Wash.

Interior or party line courts unless having 50% greater area than required must have a vent duct equal in area to 5% of the area of the court, except in bldgs. not over 3 stories high.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Every inner court shall have one or more horizontal intakes at the bottom and connecting directly with street or yard with the area of 10% of cross section of area of court.

Worcester, Mass.

Inner courts shall have one or more horizontal air intakes. It shall be 3 ft. wide and 7 ft. high and communicate with street, yard or alley.

VENT SHAFTS

Baltimore, Md.

Air and vent shafts shall be from 3 to 10 ft. wide, with area from 14 to 163 sq. ft. For tnmts. 2 to 10 stories high according to schedule.

Boston, Mass.

Shall be not less than 15 sq. ft. in area,. and not less than 3 ft. in least dimension for buildings 50 ft. high; for every increase of 10 ft. in height the least dimension shall be increased 1 ft. and area not less than 8 sq. ft.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Shall have metal skylight with openings on all sides under skylight. For 3 story buildings the minimum width shall be 3 ft. and area 15 feet. For each additional story the width shall be increased by 1 foot and area by five feet.

Chicago, Ill.

Height	Width	Area
1 story	3 feet	21 sq. ft
2 stories	3 feet	22½ sq. ft
3 stories	3 feet	27 sq. ft
4 stories	3 feet	36 sq. ft
5 stories	5 feet	48 sq. ft
6 stories	6 feet	72 sq. ft

Height	Width	Area
7 stories	8 feet	96 sq. ft
8 or more	8 feet	120 sq. ft

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Duluth, Minn.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Least dimension shall not be less than 3 ft. Shall not be less than 12 sq. ft. in area. Shall be increased 2 sq. ft. in area for each additional story over 4.

Milwaukee, Wis.

Prohibited except for purpose of lighting or ventilating water closet.

Minneapolis, Minn.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).

Shall have a dimension of not less than 5 feet. The passage way shall be constructed the same manner required for courts, except it need be only 2½ feet wide by 6 feet high.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

Minimum dimension 4 feet. Minimum area 20 feet. For each 12 feet increase in height 3 square feet shall be added; for a similar decrease 3 square feet may be subtracted.

St. Paul, Minn.

For 4 story tenements shafts shall not be less than 12 sq. ft. in area. Least dimension 3 ft. Increase 2 sq. ft. for each additional story and uniform throughout.

Seattle, Wash.

Toledo, Ohio
For 3 story tenements shafts shall not be less than 40 sq. ft. 4 stories, not less than 50 sq. ft. 10 sq. ft. additional for each additional story

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Shall not be roofed over. Least dimension shall be 3 ft. minimum area 12 sq. ft. For each story less than 4 minimum area may be decreased 1 sq. ft.

ROOMS—AREA

Baltimore, Md.
One room shall be 120 sq. ft., others 70 sq. ft.

Boston, Mass.
One room shall have at least 120 sq. ft. of floor area. Other rooms shall have at least 90 sq. ft. of floor area. Each room shall be at least 8½ ft. high.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
One room with 150 sq. ft. of floor area except water closets and bath rooms. Not more than one with less than 80 sq. ft. and none less than 63 sq. ft. No room, except water closet and bath rooms, shall be less than 7 ft. wide and 8½ ft. high.

Chicago, Ill.
Minimum area of one room shall be 120 sq. ft. others 80 sq. ft. except that those having a window not less than 18 sq. ft. in area opening on street can be 70 sq. ft.

Cincinnati, Ohio
One room—120 sq. ft. floor area. All spaces less than 70 sq. ft. in area shall be considered closets or alcoves.

Columbus, Ohio
Same as Model Law except rooms shall be only 8½ ft. high.

Dayton, Ohio
One room with 120 sq. ft. of floor area. Other rooms 70 sq. ft. of floor area.

Denver, Colo.

Detroit, Mich.
One room in tenements must contain 150 sq. ft. of floor area. Kitchenettes 50 sq. ft. of floor area. All others, except bath rooms and water closet compartments, 80 sq. ft. of floor area. No room except kitchenettes shall be less than 7 ft. wide, no room less than 8 ft. and 6 inches high.

Duluth, Minn.

Indianapolis, Ind.
Same as Model Law.

Louisville, Ky.
One room 150 sq. ft. of floor area. Others 84 sq. ft. of floor area.

Lowell, Mass.

Memphis, Tenn.
One room, 120 sq. ft. in floor area. Other rooms, 70 sq. ft. in floor area.

Milwaukee, Wis.

Minneapolis, Minn.
In two family and multiple dwellings every room shall contain at least 100 sq. ft. of floor area. No room shall be less than 7 ft. wide. This does not apply to kitchenettes or sleeping porches. Two family dwellings must be 8 ft. high; multiple dwellings 8½ ft. high.

New Orleans, La.
One room 120 sq. ft.; others except water closets and bath rooms 100 sq. ft.

Omaha, Neb.

Paterson, N. J.
One room shall have a minimum floor area of 120 sq. ft.; other rooms 70 sq. ft. No rooms shall be less than 9 ft. high.

Pennsylvania (Model Law).
Each apartment shall have at least one room with 150 square feet of floor area; every other room shall have not less than 100 square feet of floor area.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.
One room shall not be less than 120 sq. ft. in area. Other rooms 70 sq. ft.

Richmond, Va.

Rochester, N. Y.
One room 120 square feet floor area.
Others 70 square feet floor area.

St. Paul, Minn.
One room shall be 120 sq. ft. floor area, all others 70 sq. ft.

Seattle, Wash.
One room shall be at least 120 sq. ft. in area, others 80 sq. ft. except kitchen, toilet, etc.

Toledo, Ohio

Toronto, Can.
One room shall have not less than 120 sq. ft. of area, all others at least 100 sq. ft.

Washington, D. C.

Worcester, Mass.
One room—120 sq. ft. of floor area.
Others 90 sq. ft. of floor area.

ROOMS—HEIGHT

Baltimore, Md.
Cellar rooms shall be 8 ft. in clear, others 9 ft.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
Rooms shall be 8½ ft. in height. Attic rooms same in ½ area.

Cincinnati, Ohio
No room shall be less than 8 ft. in height.

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Rooms must be 8 ft. 6 in. except attic rooms in one and two family houses need be 8 ft. 6 inches in but ½ of area, but at no point less than 6 feet in height. No room in tenement hereafter erected shall be in any part less than 8 ft. 6 inches high from the finished floor to finished ceiling.

Duluth, Minn.

Indianapolis, Ind.

Louisville, Ky.
Height of rooms must be 9 ft.

Lowell, Mass.

Memphis, Tenn.
Height shall be 9 feet.

Milwaukee, Wis.

Minneapolis, Minn.

New Orleans, La.
Rooms shall be not less than 8½ ft. high. Attic rooms in but one-half.

Omaha, Neb.

Paterson, N. J.
No room shall be less than 9 ft high.

Pennsylvania (Model Law).
No room shall be less than 9 feet high, from floor covering to ceiling.

Pittsburgh, Pa.
Rooms shall be 8 ft high except attic rooms in but one-half of area.

Portland, Ore.

Providence, R. I.
Rooms shall be 8½ ft. high except attic rooms shall be 8 ft. in but one-half of area.

Richmond, Va.

Rochester, N. Y.
All rooms shall be 9 feet high.

St. Paul, Minn.
Rooms shall be 9 ft. high except attic rooms in but ½ of area.

Seattle, Wash.
Rooms must be 8 ft. 4 inches high.

Toledo, Ohio
Rooms shall be 8 ft. high except attic rooms may average 8 ft. high.

Toronto, Can.
Rooms shall be 8½ ft. high except attic rooms in but one half area.

Worcester, Mass.

ROOMS—WINDOWS

Baltimore, Md.
Window area shall be one half of floor area.

Boston, Mass.
Window area shall equal one-eighth of floor area. Windows shall open on street, yard or court.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Area of windows shall equal one eighth of floor area, opening on street, yard or court.

Chicago, Ill.
Window area shall be one tenth of floor area. Eac window shall be 10 sq. ft. in area and top 7 ft. above floor.

Cincinnati, Ohio
Window area shall equal one-tenth of floor area but never less than 12 sq. ft.

Columbus, Ohio
Each room shall have a window or windows of not less than 12 sq. ft. in area opening on street, yard or court. Total window area shall equal ⅛ of floor area.

Dayton, Ohio
Windows shall open into street, yard, or court. Window area of each room shall equal one-tenth of floor area.

Denver, Colo.

Detroit, Mich.
Shall equal one-eight of floor area. At least one window must be at least 12 sq. ft. in area. In tenements the top of at least one window shall not be less than 7 ft. 6 in. above the floor.

Duluth, Minn.

Indianapolis, Ind.
All rooms, including water closet and bath, shall have window area equal to one-seventh of floor area.

Louisville, Ky.
All rooms, including water closets and bath rooms shall have window area equal to one-tenth of floor area. No window shall be less than 12 sq. ft.

Lowell, Mass.

Memphis, Tenn.
Every room except water closet or bath, shall have window opening on street, yard or court. Window area shall equal one-tenth of floor area.

Milwaukee, Wis.
Shall have at least one window opening on street, yard or court. Window area shall equal one-tenth of floor area.

Minneapolis, Minn.
Each room shall have window opening on street, yard or court and so placed as to light all portions of room. Window area in each room shall equal ⅛ of floor area. At least one window shall be 12 sq. ft. between stop-heads.

New Orleans, La.
Window area shall be one-sixth of floor area. Windows shall be located so as to properly light all parts of room.

Omaha, Neb.

Paterson, N. J.
Shall have one window opening on street, yard or court. Window area shall equal one-tenth of floor space.

Pennsylvania (Model Law).
Every living room shall have windows equal to one-tenth of its floor area but never less than 12 square feet opening on street, yard, alley or court.

Pittsburgh, Pa.
Window area shall be one-tenth of floor area.

Portland, Ore.
Windows shall be one-tenth of floor area if they open on a space 30 ft. or more in width; if open space is less than this they shall be one-eighth of floor area.

Providence, R. I.
Window area shall be one-tenth of floor area except bath rooms, etc. One window shall open to external air.

Richmond, Va.
Shall have one room opening on street, yard or alley.

Rochester, N. Y.

St. Paul, Minn.
Windows area shall be 1-10th of floor area.

Seattle, Wash.
Window area shall be ⅛ of floor area.

Toledo, Ohio
Window area shall be one-tenth the floor area.

Toronto, Can.
Window area shall be one-tenth the floor area.

Washington, D. C.

Worcester, Mass.
Area shall equal ⅛ of floor area and shall open on street, yard or court.

BUILDINGS ON SAME LOT

Baltimore, Md.
If lower tenement is one story, space between must be 10 ft. wide, if lower tenement is 2 stories 15 ft., if 3 stories 20 ft. and 4 stories, 25 ft.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
One building shall not be built nearer than 10 ft. to any other building on the same lot, unless the wall of such building is constructed as party wall. Party wall shall be fire proof. No building shall be built nearer than 5 ft. to the lot line unless built as party wall.

Chicago, Ill.
For one story tenement space between must be 10 ft.; 5 ft. more for each added story.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.
Space between shall be 25 ft.; for 4 story buildings it shall be 30 ft. and for each additional story such space shall be increased 3 ft.

Louisville, Ky.
For bldgs. 50 ft. in height, space shall be 24 ft., for every increase of 12 ft. in height the space shall be increased by 2 ft.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Space between such bldgs. shall conform to regulations for side yards.

New Orleans, La.
No building shall be erected that will decrease the minimum depth of yards or size of courts as prescribed.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Shall be at least 16 feet apart.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Open space shall be 24 feet deep for buildings 60 feet in height; for every increase of 12 feet in height, the open space shall increase 1 foot in depth; and for a corresponding decrease below 60 feet the space may be decreased one foot.

St. Paul, Minn.
If any building is hereafter placed on the same lot with a tenement house or an apartment house, the space between said building shall always be of such size and arranged in such manner as is prescribed for yards in rear of apartment houses and tenement houses and no building of any kind shall be hereafter placed on the same lot with a tenement house or an apartment house so as to decrease the minimum size of courts or yards as hereinbefore prescribed, and if any tenement house or apartment house is hereafter erected upon any lot upon which there is already another building, it shall comply with all the provisions of this section, and in addition, the space between the said building and the said tenement house or apartment house shall be of such size and arranged in such manner as is prescribed in this section for inner courts, the height of the highest building on the lot to regulate the dimensions.

Seattle, Wash.
Each bldg. shall be provided with the required yards and courts and shall comply with the requirements of the law for each such bldg when placed alone upon lot.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Fire proof shafts not over 12 ft. high may be built if space between house and shaft equal the height of the shed. Space between bldg. on street and rear bldgs. must be equal to the sum of the rear yards computed independently.

Worcester, Mass.

ALCOVES

Baltimore, Md.
Same requirements for alcoves as for other rooms.

Boston, Mass.
Shall have an opening into room equal to 80 per cent of that side of alcove, and shall have window area of 15 sq. ft. Must conform to requirements for other rooms as regards area.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
Same requirements for alcoves as for other rooms unless it has opening of 20 percent of its entire wall surface.

Cincinnati, Ohio
Shall have an opening not less than 6 ft. wide from floor to top of windows.

Columbus, Ohio
Same as Model Law.

Dayton, Ohio
Shall have window or opening into adjoining room equal to 20 per cent of its wall area.

Denver, Colo.

Detroit, Mich.
Shall be separately lighted and ventilated. Shall not be less than 80 sq. ft. in area. No part of any room shall be enclosed in any way unless separately lighted and ventilated and containing a floor area of not less than 80 sq. ft.

Duluth, Minn.

Indianapolis, Ind.
Same as Model Law.

Louisville, Ky.
Must comply with requirements for other rooms; except an alcove may have a floor area of less than 35 ft. if it has an opening into an adjoining room equal to 20% of its total wall area.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Shall conform to requirements for other rooms.

New Orleans, La.
An alcove shall have an opening equal to 80 percent of side on which opening is and one window.

Omaha, Neb.

Paterson, N. J.
Must conform to requirements for other rooms.

Pennsylvania (Model Law).
Shall be separately lighted and ventilated and shall be not less than 90 square feet in area. No part of a room shall be enclosed unless it is properly lighted and ventilated and has an area of not less than 100 square feet.

Pittsburgh, Pa.
Same requirements for alcove as for rooms unless 20 percent of its entire wall surface opens to habitable rooms.

Portland, Ore.
Shall have opening into adjoining room equal to the width of room, but never less than twice the width of the door of an interior room. When such room has but one door, alcove shall have a window area equal to one-tenth of floor area.

Providence, R. I.
Alcove must conform to all requirements for other rooms.

Richmond, Va.

Rochester, N. Y.
Must conform to requirements for other rooms.

St. Paul, Minn.
An alcove room is to be considered a part of adjoining room.

Seattle, Wash.
Alcoves shall have a permanent opening into another room equal to 75% of floor area unless floor and window area are equal to that required elsewhere.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Alcoves are prohibited.

Worcester, Mass.
Shall have floor area of not less than 70 sq. ft.; shall be separately lighted and ventilated as provided for other rooms.

WATER CLOSET AREA

Baltimore, Md.
Water closets shall be 2 ft. 4 inches wide.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.

Duluth, Minn.
Waterclosets shall be at least three feet wide and enclosed in plaster partitions.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Each apartment shall have a separate water closet in a separate compartment; it shall not be less than 3 feet wide and shall be enclosed with plastered partitions, which shall extend to the ceiling.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Shall be not less than 2 feet 4 inches wide.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

WATER CLOSET—WINDOW AREA

Baltimore, Md.
Window areas shall be 3 sq. ft.

Boston, Mass.
Shall have at least one window, at least 1 ft. by 3, opening on street, yard, vent shaft or court.

Bridgeport, Conn.

Calgary, Can.
Windows shall be at least 3 ft. sq. in area opening directly upon a street, yard, or vent shaft.

Cambridge, Mass.
Shall have one window opening on street, yard or court. Shall have at least sq. ft. of window area.

Chicago, Ill.
Window must be 6 sq. ft. in area and at least one ft. wide.

Cincinnati, Ohio
Each compartment shall have a window area of not less than 3 sq. ft. and shall open on a street, yard, court or shaft.

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Shall have at least one window opening on street, yard or court. It shall not be less than 3 sq. ft. between stop heads.

Duluth, Minn.

WATER CLOSET—WINDOW AREA—Cont'd

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Minimum window area shall be 3 sq. ft.

Milwaukee, Wis.
All water closets shall have at least one window at least 3 sq. ft. in area opening on a street, yard, court or vent shaft.

Minneapolis, Minn.
Each water closet shall have at least one window opening on street, yard or court. Window area must be not less than 6 sq. ft. between stopheads; in multiple dwellings one of such windows shall be not less than 3 sq. ft. between stopheads.

New Orleans, La.
Window or skylight area shall not be less than 3 sq. ft.

Omaha, Neb.

Paterson, N. J.
Area shall not be less than 3 sq. ft. No window shall be less than 1 ft. wide.

Pennsylvania (Model Law).
Shall have a window area opening directly on street, yard, or alley.

Pittsburgh, Pa.
Water closets shall have windows of sufficient size. Approved by Bureau of Health.

Portland, Ore.
All such rooms shall contain at lease 3 sq. ft. of window area. This window area shall be increased by 1 ft. for every additional toilet fixture in excess of three.

Providence, R. I.
Windows shall be 3 sq. ft. in area and not less than one ft. in width.

Richmond, Va.

Rochester, N. Y.
Shall have window opening on street, yard, court or vent shaft; it shall be at least 1 foot by 3 feet.

St. Paul, Minn.
Window area of water closets shall be 3 sq. ft. and no window shall be less than 1 ft. in width unless approved by Commissioner of Public Works.

Seattle, Wash.
Windows shall be 1 ft. wide and 432 sq. inches area and at least ⅛ of floor area.

Toledo, Ohio
Must have window opening to outer air or vent shaft not less than 10 sq. ft. where practical.

Toronto, Can.

Washington, D. C.
Window area shall be 1-10 area of floor, and no window less than 4 sq. ft.

Worcester, Mass.
Shall have window containing at least 6 sq. ft. of glass, opening on street, yard or court.

SANITARY PROVISIONS

Baltimore, Md.
See Light and Ventilation, General Provisions.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
Every room must have window to street. yard or court, with minimum area 1/10 of floor area, top 7½ ft. above floor.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.

Duluth, Minn.

HABITABLE ROOMS

Indianapolis, Ind.
Infected and uninhabitable houses to be vacated upon order of Board of Health.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
When any building or any part is unfit for habitation for any reason, the Board of Health shall order such rooms vacated.

Pittsburgh, Pa.
Habitable rooms shall have 700 cu. ft. of air, shall be 8½ ft. in height except attic rooms in but one-half and a window area equal to 1/10 of floor area.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Habitable rooms must have outside windows.

Seattle, Wash.
Rooms shall be 8 ft. 4 inches in height.

Toledo, Ohio
Rooms must be 8 ft. high and have windows opening to external air equal to 10% of floor area or into another room with window area equal to 20% floor area. Top of one window must be 7 feet above the floor.

Toronto, Can.
Habitable rooms shall be of area specified under "Light and Ventilation, Area of Rooms."

Washington, D. C.

Worcester, Mass.

CELLARS AND BASEMENTS, CONDITIONS OF OCCUPANCY

Baltimore, Md.
Floors must be of concrete 4 inches thick; ceilings must be 4½ ft. above ground; must have open areaway 2½ ft. wide in front of windows; rooms must be 8 ft. in height; and there must be separate water closets; walls must be damp proof.

Boston, Mass.
As good as Model Law. Elaborate details regarding habitation of basement rooms.

Bridgeport, Conn.

Calgary, Can.
Basement cannot be used for living rooms, except for janitor unless ceiling is at least 6 ft. above grade level.

Cambridge, Mass.
Prohibited.

Chicago, Ill.
Living in cellar prohibited. Basement rooms must be 8½ ft. high; one-half above grade; 4½ ft. above street grade; have separate water closet and water proof floors.

Cincinnati, Ohio
Basement must conform to following provisions; rooms must be 7½ ft. high in existing tenements and 8 ft. high in those hereafter erected; outside there must be an open air space 2½ ft. wide, of every portion occupied and along entire street frontage; its bottom must be ½ ft. below floor level of basement and properly drained, top must be covered with iron grating. Floors and walls must be damp proof.

Columbus, Ohio
Prohibited except for cooking and laundry. Permitted in case of tenements prior erected with special permit from Health Dept.

Dayton, Ohio
Sleeping in basement prohibited except in case of janitor. Other rooms may be in basement if within 30 ft. of the street; all windows shall have stationary sash, all exterior entrances shall have vestibules with 2 doors and no open areas shall connect directly with the rooms.

Denver, Colo.

Detroit, Mich.
Prohibited in cellars. Permitted in basements if in addition to other requirements of this code it shall be well drained and dry and properly lighted and ventilated.

Duluth, Minn.

Indianapolis, Ind.
Basements shall not be occupied unless rooms are at least 9 ft. high; unless ceiling is 4½ ft. above the yard grade; unless there shall be a separate water closet compartment; unless window area equals one-seventh of room area and one window equals 12 sq. ft. between stopheads; unless all walls are damp proof.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Prohibited.

Milwaukee, Wis.
May be used provided that rooms are 8 ft. high; that ceiling is 4 ft. above the lot; that window area is 1-10 of floor area and that they face on street, yard or court, and that walls shall be damp proof and water proof.

Minneapolis, Minn.
Cellars shall not be inhabited. Basement rooms shall not be occupied except by janitor. They shall have sufficient light and ventilation, be kept dry and conform to other requirements of this act. In bldgs. erected prior it shall not be occupied without written permit from Commissioner of Health; it shall be 7 ft. high; shall have water closet; shall be damp proof; and adequately lighted and ventilated.

New Orleans, La.
Basements may not be occupied for living purposes unless the room is 8½ ft. high. Must have separate water closet; total window area 1/6 floor area; opening upon street or yard, and the walls must be damp proof and water proof.

Omaha, Neb.
Rooms shall be at least 7½ ft. in clear and have not more than 4 ft. 8 inches below the grade. Windows shall open on street, yard or court, and if they front solely on street they shall be 3 ft. back from lot line; if ceiling is less than 8½ ft. in the clear, window area shall be 15% of floor area.

Paterson, N. J.

Pennsylvania (Model Law).
No cellar room shall be occupied for living purposes. Basement rooms shall not be used for sleeping purposes, but may be for other purposes if they are free from dampness.

Pittsburgh, Pa.
Living in cellar is prohibited. Basement rooms must be 8½ ft. high; ½ above grade; windows ⅛ floor area with one-half of sash made to open full width and top within 6 in. of ceiling; water closet appurtenant to every apartment and every room must have a window opening on a street, yard or court of not less than 100 sq. ft.

Portland, Ore.
When used for habitation rooms shall be 8½ ft. high except for use of janitor which need be only 8 ft. One-third of room shall be above street grade, and shall have water closet.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
May be occupied by janitor and family provided that each room is 9 feet high, that ceiling is 4½ feet above the curb, that each room has a window opening on street or yard, and the total window area is ⅛ of floor area, that each room shall be damp proof and that it shall be provided with a water closet.

St. Paul, Minn.
Cellar may not be occupied for living purposes unless rooms are 8 ft. high; ceilings 2½ ft. above street level; windows opening on street or open courts equal to ⅛ of floor area; use of separate water closet; and walls must be damp proof.

Seattle, Wash.
Occupancy prohibited unless not more than ⅔ of height is below grade level and total window area is 1-10 of floor area; walls must be damp proof and water proof; must meet with approval of the Supt. of Buildings.

Toledo, Ohio
Rooms must be 8 ft. high; ceilings 4 ft. above grade; must be properly drained and ventilated; and each apt. must have 9 sq. ft. of glass per 100 sq. ft. floor area.

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Prohibited in cellars. Basements when used for habitation shall have ceiling 4½ ft. above grade, be damp proof and conform to other requirements of this act.

CELLAR FLOORS

Baltimore, Md.
Must be of concrete four inches thick with a top finish of mortar one inch thick.

Boston, Mass.
Shall have floor of concrete, cement and gravel, tar and gravel, by asphalt, or by bricks. All cellars must be water proof and damp proof.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Every dwelling shall have a basement, cellar or excavated space at least 3 ft. deep, or building shall be elevated 3 ft. Space shall be lighted and ventilated and properly drained. When necessary to keep floor dry, the walls shall be water proof.

Chicago, Ill.
Must be of Portland cement concrete three inches thick.

Cincinnati, Ohio
Shall be properly ventilated by windows or vent flues.

Columbus, Ohio
House shall be 2 ft. above grade. Cellars shall be properly lighted and ventilated.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Every dwelling shall have a cellar or basement or excavated space 3 ft. deep or elevated 2 ft. Walls shall be damp proof and water proof, and it shall be properly ventilated.

Duluth, Minn.

Indianapolis, Ind.
Shall have cellar at least 3 ft. deep. Shall be damp proof and properly lighted and ventilated. When necessary to prevent spread of damp air, the cellar floor shall be covered with concrete.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Shall be damp proof and water proof.

Milwaukee, Wis.

Minneapolis, Minn.
Every tenement shall have cellar, basement or excavated space under entire floor at least 3 ft. deep or shall be elevated 3 ft. It shall be enclosed, properly ventilated and drained. When necessary wall shall be damp proof.

New Orleans, La.
Must be damp proof and water proof.

Omaha, Neb.
Walls and floor must be plastered on outside with Portland cement below the ground level and they shall be laid in cement mortar. Shall have a cement floor not less than 3 in. thick laid on 6 inches of sand or cinders.

Paterson, N. J.
Floors shall be covered with 4 inches of concrete.

Pennsylvania (Model Law).
Shall be covered with cement or concrete.

Pittsburgh, Pa.
Must be damp proof and water proof.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Must be damp proof and water proof.

Seattle, Wash.
Must be damp proof and water proof.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Shall be of cement 4 inches thick or concrete 2 inches thick, or paved with hard brick laid in cement. Woodwork shall be 6 inches clear of ground.

Worcester, Mass.

WATER SUPPLY

Baltimore, Md.
Every apartment must have sink with running water.

Boston, Mass.
Sink with running water required in each apartment in tenements prior erected one or more places required on each floor.

Bridgeport, Conn.

Calgary, Can.
If there is a water main in the street on which a building fronts, it must be connected.

Cambridge, Mass.
Sink required in each apartment.

Chicago, Ill.
There must be sink and running water for each apartment.

Cincinnati, Ohio
Shall be a sink with running water in each apartment. In tenements prior erected there shall be a sink for every 2 apartments.

Columbus, Ohio

Dayton, Ohio
Sink with running water required in each apt.

Denver, Colo.

Detroit, Mich.
Sink and running water required in every apartment.

Duluth, Minn.
Every apartment must have sink and running water.

Indianapolis, Ind.
Each apartment shall have sink with running water, provided sewer is within 100 ft. of water main.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.
If city water is accessible and one or more places shall be provided on each floor. If city water is not accessible wholesome water shall be provided on lot and be kept free from contamination.

Minneapolis, Minn.
Sink shall be provided for each apartment.

New Orleans, La.
There must be proper sink with running water in each apartment.

Omaha, Neb.

Paterson, N. J.
One sink with running water required in each apt. if water is accessible. When supply comes from well it shall be subject to test from Board of Health.

Pennsylvania (Model Law).
Tenements within 100 feet of water main shall be provided with plumbing system and connection with such water main; until such time no tenement shall be occupied, unless it has a private sewer system and water supply that is satisfactory to the Board of Health. In each apartment there shall be at least one kitchen sink.

Pittsburgh, Pa.
In tenement where it is possible to connect with water main, there shall be one sink for for every suite of rooms.

Portland, Ore.
Required at one or more places on each floor. Owner shall provide tanks, pumps or other appliances to receive and distribute water. Tenements hereafter erected shall have sink in each apartment. Those prior erected shall have one on each floor, accessible without passing through another apartment.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Sink with running water required in every apartment.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
There shall be water supply in each apartment.

Worcester, Mass.

WATER CLOSET ACCOMMODATIONS

Baltimore, Md.
Every apartment must have a separate water closet in separate compartment. There must be separate water closet for each family.

Boston, Mass.
Same as Model Law except apartments of less than 4 rooms may have water closet for every 3 rooms; and a general toilet room may be maintained in addition.

Bridgeport, Conn.
Shall be a water closet for every apartment of 3 rooms; and one for every 2 apartments of less than 3 rooms.

Calgary, Can.
There shall be separate water closet accommodations for every famliy or suite.

Cambridge, Mass.
Same as Model Law except general toilet room may be provided in addition to required water closet.

Chicago, Ill.
There shall be separate water closet for each apartment except where apartment contains only two rooms, when there must be water closet for every two apartments.

Cincinnati, Ohio
Same as Model Law, except there may be one water closet for 2 apartments if the aggregate number of rooms does not exceed 3; and if it is adjacent to each apartment and is accessible to each without passing through another apartment. In existing tenement houses there shall be one water closet for every 2 apartments.

Columbus, Ohio
Same as Model Law.

Dayton, Ohio
Shall be provided in each apt. in bath room or separate compartment. It shall not open on kitchen or dining room.

Denver, Colo.

Detroit, Mich.
Same as Model Law except general toilet room may be provided in addition to other requirements.

Duluth, Minn.
There shall be one water closet in separate compartment for each apartment.

Indianapolis, Ind.
See Model Law. In houses prior erected there shall be a water closet for every two families.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Same as Model Law except where apartments consists of but one or two rooms there may be but one water closet to every three rooms.

Milwaukee, Wis.
One water closet required for every apt. in a separate compartment. Where apts. consist of only one or two rooms, one water closet may be provided for every two. In tenements prior erected one water closet is required for every two apts. if the number of persons does not exceed eight.

Minneapolis, Minn.
See Model Law. In bldgs. prior erected one water closet for two apartments.

New Orleans, La.
There shall be one water closet in separate compartment for each apartment, ventilated to the satisfaction of the Board of Health.

Omaha, Neb.
There shall be at least one water closet for every two apartments.

Paterson, N. J.
Same as Model Law except general toilet may be maintained in addition, and in apts. consisting of one or two rooms, toilet may be maintained for every 3 rooms.

Pennsylvania (Model Law).
There shall be a separate water closet in each apartment in a separate compartment from every other water closet and shall be enclosed with plastered partitions that extend to ceilings. The floor shall be water proof; water proofing shall extend 6 inches up sides of walls. No water closet shall be maintained in cellar.

Pittsburgh, Pa.

Portland, Ore.
A separate water closet in a separate compartment for each apartment required, in case of 2 room apartments there may be one water closet for 2 apartments.
Several toilets may be maintained in one compartment in additional to above requirements. Water closets prohibited in cellars.

Providence, R. I.
There shall be separate water closet in separate compartment within each apartment. Apartments of one or two rooms must have at least one water closet for every three rooms.

Richmond, Va.

Rochester, N. Y.
Same as Model Law except for apartments of one or two rooms there shall be one water closet for every three rooms.

St. Paul, Minn.
There shall be one water closet in separate compartment for every three apts. of 2 rooms and one for each apt. of 3 or more rooms.

Seattle, Wash.
Every apt. or tenement shall have at least one water closet located in a separate compartment. Any tenement or apt. having three or more rooms shall have one water closet accessible without passing through any bedroom.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Every tenement shall have water closet for each suite or for each four rooms.

Worcester, Mass.
A water closet and bath required in a compartment enclosed to ceiling, required in every apartment.

OVERCROWDING—CUBIC AIR SPACE

Baltimore, Md.
Every room shall have 400 cubic feet air space for each person over 12 years and 200 cubic feet for each person under 12.

Boston, Mass.
Board of Health may by vote limit the number of persons living in any dwelling.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
There must be 400 cu. ft. air space for adults and 200 cu. ft. for children under 12 years.

Cincinnati, Ohio
No room shall be over crowded. Adults must have 400 cu. ft. of air space; each child under 12, 200 cu. ft.

Columbus, Ohio
600 cu. ft. of air required in each room for each adult and 400 cu. ft. for each child under 12.

Dayton, Ohio
Adults must have 400 cu. ft. of air space and children under 12, 200 cu. ft. of air space.

Denver, Colo.

Detroit, Mich.
500 cu. ft. of air required for each adult in sleeping rooms and 300 cu. ft. for children under 12.

Duluth, Minn.
Cellar walls and ceilings and all inner and outer walls of courts, if not of light colored material, must be whitewashed or painted.

Indianapolis, Ind.
In case of overcrowding Board of Health may order number of persons sleeping in a room reduced so that each adult shall have 400 cu. ft. of air space and each child under 12, 250 cu. ft. of air space.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
600 cu. ft. of air to each adult and 400 to each child under 12 is required.

New Orleans, La.

Omaha, Neb.
No room shall be occupied so that any adult shall have less than 400 cu. ft. of air space or any child under 12 less than 200 cu. ft. of air space.

Paterson, N. J.

Pennsylvania (Model Law).
No room used for sleeping purposes shall be occupied by more persons than would give to each person over 12 years of age 400 cubic feet of air space, and to each 12 years or under 200 cubic feet of air space. When over crowding is found the Board of Health shall place a tin placard on the door of such room stating the number of persons it will accommodate and such room shall not be occupied by more.

Pittsburgh, Pa.
There shall be 700 cu. ft. of air per room—400 cu. ft. for each person over 12 years and 200 cu. ft. for each child under 12.

Portland, Ore.

Providence, R. I.
Cubic air space to be regulated by Board of Health.

Richmond, Va.

Rochester, N. Y.
600 cubic feet for each person in apartment, 600 cubic feet for each adult in a sleeping room, and 300 cubic feet for each child under 12 in sleeping room is required. It shall be unlawful for any person to rent an apartment to be occupied by a greater number than it can accommodate.

St. Paul, Minn.
There shall be 512 cu. ft. of air for each person over 14 years and 300 for each child under 14.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
There shall be 400 cubic feet of air for each person 10 years old or over.

Worcester, Mass.

CLEANLINESS OF BUILDINGS

Baltimore, Md.
Every tenement shall be maintained in good repair and in a cleanly condition.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
Owner of tenment must keep it clean and wholesome and every apartment adequately lighted and ventilated.

Cincinnati, Ohio
Must be kept clean and free from dirt. Owners must keep unoccupied apartments clean.

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Shall be kept clean and free from filth, etc., at all times. Owner responsible. Garbage chutes prohibited.

Duluth, Minn.

Indianapolis, Ind.
Every tenement shall be kept clean and free from all accumulation of filth, garbage, etc.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Shall be kept clean and free from dirt, filth, etc. Tenant shall keep his apts. clean; owner shall see that all other parts of bldg. are kept clean and in a sanitary condition.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Buildings, yards, courts, alleys and passageways shall be kept clean and free from dirt, filth and garbage. The owner shall clean all parts of the building to the satisfaction of the Board of Health, and keep them clean at all times. The tenant shall keep his apartment in cleanly condition and no person shall put filth or garbage in shaft, court or yard.

Pittsburgh, Pa.
Every tenement shall be kept in good repair and shall be clean and free from any accumulation of dirt, filth, etc.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Shall be kept clean in all parts at all times. Owner responsible.

St. Paul, Minn.
Owner or agent held responsible for cleanliness of bldg.

Seattle, Wash.

Toledo, Ohio
All parts of building must be kept free from loose rubbish and debris.

Toronto, Can.

Washington, D. C.
Occupants must keep all parts of buildings and grounds clean and wholesome.

Worcester, Mass.

WHITEWASHING OF WALLS

Baltimore, Md.
Cellar walls and ceilings shall be whitewashed or painted a light color at least once a year; also shaft or court walls.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.
Cellar walls and ceilings shall be whitewashed or painted a light color.

Cincinnati, Ohio
Walls of shafts, cellars and courts shall be whitewashed unless painted with a light color.

Columbus, Ohio
Required on walls of courts and walls and ceiling of cellars, unless painted with light paint.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Required on walls and ceilings of cellars and walls of courts and shafts, unless painted a light color.

Duluth, Minn.

Indianapolis, Ind.
Cellar walls and ceilings and walls of courts and shafts shall be whitewashed unless painted a light color.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Required in courts unless painted a light color; may be in rooms upon request of Commissioner of Health.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Cellar walls and ceilings and walls of courts shall be whitewashed or painted a light color. It shall be renewed when required by Board of Health.

Pittsburgh, Pa.
Walls must be thoroughly cleansed and white washed whenever required by the Department of Health.

Portland, Ore.
Required in all shafts and courts unless painted a light color.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

DRAINAGE OF COURT AREA SAND YARDS

Baltimore, Md.
The bottom of all courts shall be paved with concrete.

Boston, Mass.
Courts, yards and areas shall be graded, drained and paved.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Courts and yards shall be graded, paved and drained.

Chicago, Ill.
Court area and yards shall be properly drained

Cincinnati, Ohio
Yards, courts and shafts must be thoroughly drained.

Columbus, Ohio
Courts, areas and yards shall be graded and drained and when required by Health Dept. concreted.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Courts, areas and yards shall be graded and drained and paved when required by Health Officer.

Duluth, Minn.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Courts, shafts, yards and areas shall be concreted and drained.

Milwaukee, Wis.

Minneapolis, Minn.
Courts yards and areas shall be graded so that water may drain into sewer or street. When required by Commissioner of Health they shall be concreted.

New Orleans, La.
All courts and yards shall be properly graded, drained and paved to the satisfaction of Board of Health.

Omaha, Neb.
Shall be provided with sanitary drainage and graded or graded and paved as conditions may require the same in clean and sanitary condition.

Paterson, N. J.

Pennsylvania (Model Law).
All courts, shafts and yards shall be provided with sufficient drainage and paved with concrete.

Pittsburgh, Pa.
Tenement must have yards, areas, and courts drained into the sewer.

Portland, Ore.
Shafts, courts and areas shall be properly paved and drained.

Providence, R. I.
Tenement courts and yards shall be properly graded and drained and paved to satisfaction of inspector.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
All shafts, courts, areas and yards shall be properly concreted, graded and drained and shall be connected with sewer.

Seattle, Wash.

Toledo, Ohio
Areas and courts of 15 sq. ft. or more be drained.

Toronto, Can.

Washington, D. C.
Owner must cause areas and yards to be properly graded, paved and drained.

Worcester, Mass.
Every inner court and area shall be concreted, graded and drained.

SEWER CONNECTIONS

Baltimore, Md.
Required where there is a sewer in the street.

Boston, Mass.
Every building shall be connected with sewer if one is accessible, if not with a cesspool.

Bridgeport, Conn.
Plumbing of every bldg. shall be independently connected with sewer unless otherwise permitted by Board of Bld. Commissioners and Supt. of Sewers.

Calgary, Can.

Cambridge, Mass.
Multiple dwellings shall not be built on street without sewers.

Chicago, Ill.

Cincinnati, Ohio
All tenements abutting on streets having sewers shall be connected with same. Each building must have separate connection with sewer, except where one building is on the same lot in the rear of another.

Columbus, Ohio
No tenement shall be erected on any street unless city water and sewer are accessible.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Multiple dwelling shall not be erected on any street unless city water and sewer are accessible. Each building shall be connected with same before it is occupied.

Duluth, Minn.
Cesspools or privy prohibited. Every tenement shall have plumbing system connected with sewer before occupation.

Indianapolis, Ind.
Every tenement shall be connected with public sewer if it is within 100 ft. of house.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Multiple dwellings shall not be erected on any street unless there is city water and a sewer in such street.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.
If sewer is accessible every tenement shall be connected before it is occupied. If it is within 150 ft. of public sewer a private sewer shall be built connecting with it.

Pennsylvania (Model Law).
All tenements shall be connected with sewer main if it is within 100 feet of house. Tenements hereafter erected shall not be inhabited until such connections are made or an approved private system is established. Tenements prior erected shall be connected to sewer main if accessible, but if not a septic tank shall be installed, subject to approval of Board of Health.

Pittsburgh, Pa.
Tenement shall be connected with sewer where Bureau of Health judges it possible.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Every tenement shall be connected with public sewer if such is provided; if not, drain pipes from buildings may be connected with cesspools.

Seattle, Wash.

Toledo, Ohio
Cellars shall be connected with sewer where possible.

Toronto, Can.

Washington, D. C.
Sewer connections are required.

Worcester, Mass.

ASHES AND GARBAGE

Baltimore, Md.

Boston, Mass.
Owner shall provide water tight covered receptacles.

Bridgeport, Conn.

Calgary, Can.
Tenement must be provided with approved refuse and garbage receivers to the satisfaction of the Sanitary Department.

Cambridge, Mass.
Chutes prohibited.

Chicago, Ill.
Receptacles for ashes and garbage must be provided by the owner. One of each per story to every five persons.

Cincinnati, Ohio
Owners shall provide metal receptacles.

Columbus, Ohio
Owner shall provide proper receptacles. Chutes prohibited.

Dayton, Ohio
Chutes prohibited.

Denver, Colo.

Detroit, Mich.
Owner shall provide proper covered receptacle of nonabsorbent material. Chutes prohibited.

Duluth, Minn.

Indianapolis, Ind.
Owner shall provide suitable receptacles. Chutes are prohibited.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Metal cans must be provided by each family. Owner shall provide a general can to receive such waste as may be necessary. Chutes are prohibited.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Owner or tenant shall provide approved tight receptacles for ashes and garbage; chutes or shafts leading to them are prohibited.

Pittsburgh, Pa.

Portland, Ore.
Owner shall provide receptacles of incombustible material.

Providence, R. I.
Owners of tenements shall provide suitable receptacles for ashes, rubbish and refuse matter, satisfactory to Supt. of Health.

Richmond, Va.

Rochester, N. Y.
Owner shall provide receptacles.

St. Paul, Minn.
There shall be suitable receptacles for ashes and garbage, constructed of incombustible material; interior garbage chutes or shafts leading to same shall not be permitted.

Seattle, Wash.
There shall be suitable receptacles for ashes, constructed of incombustible material.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Owner shall provide suitable places for reception of garbage and other refuse.

Worcester, Mass.

JANITOR

Baltimore, Md.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio
Required to reside in and be responsible for tenement unless occupied by owner.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Required to reside in and be responsible for building in which owner does not reside, if Health Officer shall so require.

Duluth, Minn.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Required in multiple dwellings in which owner does not reside. He shall have charge if required by Commissioner of Health.

JANITOR—Cont'd

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
In tenements, occupied by 6 families or more in which owner does not reside shall have a janitor who shall reside in the house and have charge of it, if the State Building Commissioner or Chief Building Inspector shall require it.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
Required in tenement occupied by 8 families or over unless owner resides in house. Janitor shall reside in and have charge of tenement.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.
Tenement with over five families where owner does not reside shall have janitor.

Worcester, Mass.

PLUMBING

Baltimore, Md.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Shall not be enclosed with woodwork.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Plumbing fixtures shall not be enclosed with woodwork. Pipes shall be exposed when required by Health Officer.

Duluth, Minn.

Indianapolis, Ind.
In accordance with plumbing regulations of city.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
No fixture shall be enclosed with woodwork. Shall be sanitary in every particular.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Shall be exposed except where passing thru floors.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
All plumbing fixtures must be set open and free from all enclosing woodwork.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

CESSPOOLS

Baltimore, Md.

Boston, Mass.
Permitted if sewer is not accessible.

Bridgeport, Conn.
Shall not be placed nearer than 20 ft. from any residence.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio
Not permitted if sewer is accessible, must be 25 ft. from any building.

Columbus, Ohio
Prohibited in connection with tenements hereafter erected; permitted with those prior erected if sewer is inaccessible.

Dayton, Ohio

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.
Not permitted when sewer main is accessible.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Prohibited in connection with multiple dwellings.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.
Prohibited unless absolutely necessary.

Pennsylvania (Model Law).
When permitted they shall be in a yard and shall be covered with an iron cover flush with the ground. When it is located so as to be menace to health, the Health Department may order it moved or its location changed.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Cesspools allowed where no sewer provided, but no water closet shall be connected to a leaching cesspool.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Worcester, Mass.

Worcester, Mass.

OUTSIDE TOILETS

Baltimore, Md.

Boston, Mass.
Privy vaults shall be of brick and have capacity of 250 cubic feet.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio
Each water closet shall have a separate compartment 2½ by 4 ft. and 10 ft. high. Must be provided with lock. Must be properly lighted and ventilated.

Columbus, Ohio
Privy vault permitted only in case of tenements prior erected, if sewer is not accessible.

Dayton, Ohio
Permitted when water supply is not available.

Denver, Colo.

Detroit, Mich.
Water closets shall not be placed out of doors.

Duluth, Minn.

Indianapolis, Ind.
Not permitted when sewer main is accessible.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Prohibited.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
In no case shall a privy vault be maintained in houses hereafter erected; where they are already maintained they may be retained where no sewer is available, if they are kept clean.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.
Must be cleaned at least once each year, or oftener if ordered by Commissioner of Health.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

REQUIREMENTS AND REMEDIES—Vacation of Buildings.

Baltimore, Md.
Power given to Inspector of Bldgs. when bldgs. are dangerous to life and health.

Boston, Mass.
Building Commissioner may with written approval of the Mayor order vacation of building.

Bridgeport, Conn.
Power given to Board of Building Commissioners in case of unsafe building.

Calgary, Can.

Cambridge, Mass.
Supt. of Buildings may with written approval of Mayor order vacation of any building he considered unsafe.

Chicago, Ill.

Cincinnati, Ohio
Board of Health may order any building vacated found to be in an unsanitary condition.

Columbus, Ohio
Power given to Health Dept.

Dayton, Ohio
Power given to Chief Inspector for dangerous bldgs.

Denver, Colo.
Power given to Building Inspector with approval of Commissioner of Safety.

Detroit, Mich.
Power given to Health Officer.

Duluth, Minn.

Indianapolis, Ind.
Board of Health shall order infected and unsanitary houses vacated.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.
Power given to Building Commissioner.

Milwaukee, Wis.
Permitted when tenements are not accessible to sewers.

Minneapolis, Minn.
Power given to Inspector of Buildings.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Power given to State Building Commissioner, or Chief Building Inspector, or local Board of Health, or State Department of Health.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va.
Power given to Bldg. Inspector where bldgs. are unsafe or endanger life.

Rochester, N. Y.
The Bureau of Buildings may post order on dangerous building that same shall not be occupied until made safe.

St. Paul, Minn.
Power given to Commissioner of Health.

Seattle, Wash.

Toledo, Ohio
Power given to Building Inspector.

Toronto, Can.
Power given to Inspector of Bldgs.

Washington, D. C.
Power given to Board of Condemnation of Unsanitary Bldgs.

Worcester, Mass.

UNLAWFUL OCCUPANCY

Baltimore, Md.

Boston, Mass.
Building not permitted to be occupied until sufficient means of egress have been provided.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.
Building not to be occupied without permit of occupancy, Superintendent may order use or occupancy modified or building vacated till it complies with ordinance and so obtains permit.

Chicago, Ill.

Cincinnati, Ohio
Shall be unlawful for any person to lease or permit to be occupied any building unless such building is clean and sanitary.

Columbus, Ohio
Occupation of tenement house failing to comply with ordinance is unlawful.

Dayton, Ohio
Unlawful to occupy bldg. which does not comply with orders of Chief Inspector.

Denver, Colo.

Detroit, Mich.

Duinth, Minn.

Indianapolis, Ind.
If building is occupied without certificate of aproval no rent shall be recoverable.

Louisville, Ky.

Lowell, Mass.
Vacation of dangerous and unsafe bldgs. by Inspector of Buildings.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Occupation without certificate of compliance is unlawful.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).
Unlawful to occupy buildings vacated because of violation of law, until made to comply with law.

Pittsburgh, Pa.

Portland, Ore.

Providence, R. I.

Richmond, Va

Rochester, N. Y.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

APPROVAL OF PLANS

Baltimore, Md.
Plans must be approved by Inspector of Bldgs. before work is begun.

Boston, Mass.
No construction or alteration shall be done without a permit, and such work shall be done in accordance with drawings approved by Commissioner.

Bridgeport, Conn.
Plans must be approved before permit is given for work to be begun.

Calgary, Can.
Plans must be submitted and approved by Health Officer before work is begun.

Cambridge, Mass.
No work done except in accordance with drawings approved by Superintendent.

Chicago, Ill.

Cincinnati, Ohio
Construction shall not begin until permit is issued. Permit issued by Commission of Buildings unless the building involves an excavation within 3 ft. of curb line then permit must be obtained from Director of Public Service to make such excavation.

Columbus, Ohio
Plans must be approved by Building Dept. and where lighting, ventilation or sanitation is involved by Health Dept. also.

Dayton, Ohio
Plans must be approved by Division of Bldg. Inspection before work may be commenced.

Denver, Colo.
Work not to be started without a permit from Building Inspector, which may not be granted unless plans conform to provisions of City ordinances.

Detroit, Mich.
Plans must be approved by Health Officer before work can be begun.

Duluth, Minn.

Indianapolis, Ind.
Plans must be submitted to Board of Health or Inspector of Buildings.

Louisville, Ky.

Lowell, Mass.
Plans must be approved by Inspector of Buildings.

Memphis, Tenn.
Plans must be submitted to Building Commissioner.

Milwaukee, Wis.
Plans must be approved by Inspector of Buildings before work is commenced.

Minneapolis, Minn.
No work on building commenced until plans are approved by Inspector of Buildings.

New Orleans, La.
Plans must be approved by City Engineer.

Omaha, Neb.
Shall be submitted to Building Inspector. Construction shall not start until permit is issued.

Paterson, N. J.
Unlawful to proceed with work on any bldg. until plans have been approved by Inspector of Buildings.

Pennsylvania (Model Law).
Plans must be submitted to the State Building Commissioner or Chief Building Inspector also to local Board of Health or State Department of Health.

Pittsburgh, Pa.
Plans must be submitted and approved by Building Department before work is begun.

Portland, Ore.
No work to be begun without a permit. Application to Inspector of Buildings for permit must be accompanied by the plans.

Providence, R. I.
Plans shall be approved by Bldg. Inspector.

Richmond, Va.
Plans must be approved by Bldg. Inspector before work is begun.

Rochester, N. Y.
Plans must be approved by Building Bureau before work is commenced.

St. Paul, Minn.
Plans must be submitted and approved by Commissioner of Public Works.

Seattle, Wash.

Toledo, Ohio
Plans must be submitted and approved before work is begun.

Toronto, Can.
Plans must be submitted and approved before work is begun.

Washington, D. C.

Worcester, Mass.
Such plans as Superintendent of Public Buildings may require must be approved by him before permit is issued allowing work to be begun.

CERTIFICATE OF APPROVAL

Baltimore, Md.
Every tenement must be inspected and certificate of approval given before same can be occupied.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.
Certificate from the Sanitary Inspector required before building can be occupied.

Cambridge, Mass.
No building shall be occupied until permit of occupancy has been issued by Superintendent.
Building Department.

Chicago, Ill.
Owner must notify Commissioner of Buildings when tenement is ready for lathing. Tenement must be inspected and if it conforms to law, a certificate is issued.

Cincinnati, Ohio

Columbus, Ohio
No bldg. occupied without a certificate of compliance from Building Dept.

Dayton, Ohio
Chief Inspector shall make or have made a final inspection of Bldg. and if it conforms to law shall issue certificate.

Denver, Colo.

Detroit, Mich.
Building shall not be occupied without certificate from Health Officer that it conforms to requirements.

Duluth, Minn.

Indianapolis, Ind.
No. building shall be occupied until the issuance of a certificate by the Board of Health.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
No bldg. shall be occupied without a certificate from Inspector of Bldgs. that it conforms to requirements.

New Orleans, La.

Omaha, Neb.
Tenement shall not be occupied until certificate of approval is granted by Plumbing Inspector.

Paterson, N. J.

Pennsylvania (Model Law).
Building shall not be occupied until permit authorizing its use be issued.

Pittsburgh, Pa.
Certificate of approval must be issued by Department of Public Health before occupation.

Portland, Ore.
Inspector of Buildings shall inspect building before occupation and if it conforms to law issue a certificate to that effect.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.
No tenement shall be occupied until the issuance of certificate by Bureau of Buildings that it conforms to the requirements.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio
Violations left to Inspector of Bldgs. to discover.

Toronto, Can.

Washington, D. C.

Worcester, Mass.

REGISTRATION OF TENEMENTS

Baltimore, Md.
Every tenement and apartment house must be registered as required by Inspector of Bldgs.

Boston, Mass.

Bridgeport, Conn.

Calgary, Can.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio
Every owner of tenement house and lessee of whole house shall register in Health Dept. and also file a description of the property. Every owner, agent or lessee may file in the Dept, of Health a notice with his name and address or that of an agent of the house for purpose of receiving service of process.

Dayton, Ohio

Denver, Colo.

Detroit, Mich.
Every owner and lessee shall file name and address and description of property with Board of Health. Every owner, agent, or lessee may file with Board of Health notice with name and address of an agent of such house for purpose of receiving service of process.

Duluth, Minn.
Owner's name must be registered with Health Department.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.

Memphis, Tenn.

Milwaukee, Wis.

Minneapolis, Minn.
Every owner, agent, or lessee of a dwelling may file in Health Dept. name and address of agent of such house for receiving service of process, also a description of property.

New Orleans, La.

Omaha, Neb.

Paterson, N. J.

Pennsylvania (Model Law).

Pittsburgh, Pa.
Owner, lessee, or person having control of tenement house shall file name and address, name of authorized agent, description by street, number, number of apartments, rooms, families, etc.

Portland, Ore.

Providence, R. I.

Richmond, Va.

Rochester, N. Y.

St. Paul, Minn.

Seattle, Wash.

Toledo, Ohio

Toronto, Can.

Washington, D. C.

Worcester, Mass.

PENALTIES

Baltimore, Md.
Fine $25 to $100 for each and every day.

Boston, Mass.
Fine not exceeding $500.

Bridgeport, Conn.
Fine of not more than $100 upon conviction for each violation.

Calgary, Can.
Not over $50 and costs.

Cambridge, Mass.

Chicago, Ill.

Cincinnati, Ohio
Fine of not less than $5 or more than $500.

Columbus, Ohio
Not less than $5 nor more than $200 for first offense, and not less than $25 nor more than $500 for second offense and each subsequent offense. Violation, after prosecution is begun shall be decreed a separate offense each week.

Dayton, Ohio
Fine of not less than $5 nor more than $500. Violation shall constitute a separate offense each day after notification.

Denver, Colo.
Fine of not less than $5 nor more than $300. Violation of each day shall constitute a separate offense.

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.
Every person guilty of violation of this act shall be punished by imprisonment for 10 days for each day that violation shall continue; or by fine of not less than $10 or not more than $100 if the offense is not willful, or if willful not more than $250. Any person assisting in the violation of this act shall pay a penalty of $50.

Louisville, Ky.

Lowell, Mass.
Fine not less than $10 nor more than $100, or imprisonment not exceeding 90 days.

Memphis, Tenn.
Fine of not less than $10 nor more than $50. Violation each day shall be decreed a separate offense.

Milwaukee, Wis.

Minneapolis, Minn.
Fine of not more than $100 or confinement in city workhouse for not more than 90 days, and upon failure to pay fine by confinement until such fine is paid. Each day's continuance of violation shall be decreed a separate offense.

New Orleans, La.
$25 or 30 days' imprisonment.

Omaha, Neb.
Fine of not less than $10 nor more than $100 for each day violation continues.

Paterson, N. J.
Fine of $50 or imprisonment of not more than 10 days for each and every violation. After first conviction person who continues to violate shall for each day be subject to fine of $25.

Pennsylvania (Model Law).
Any expense incurred by vacating authorities in vacation shall be recoverable against owner.

Pittsburgh, Pa.
$10 to $100. After first offense for every week continuous fine of $10 to $100. In default of payment of fine, term in county jail not exceeding 30 days.

Portland, Ore.
Fine not exceeding $500, or imprisonment of not more than 6 months or both. Violation shall constitute a separate offense each day.
Any part of building erected or altered in violation of code shall be torn down at expense of those making the violation.

Providence, R. I.
$100 fine for first day of such offense; not exceeding $20 for each subsequent day such violation continues.

Richmond, Va.
For every violation and noncompliance respectively, fine of not less than $5 nor more than $100.

Rochester, N. Y.
Fine not exceeding $150 or by imprisonment not exceeding 150 days or by a penalty of $500 to be recovered by the city in a civil action.

St. Paul, Minn.
Imprisonment for three months or $500 fine, or both.

Seattle, Wash.

Toledo, Ohio
$5 to $100 or imprisonment. Each day a separate offense.

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Fine of not more than $100 for each violation.

ADMINISTRATION AND ENFORCEMENT

Baltimore, Md.
Inspector of Buildings.

Boston, Mass.
Building Commissioner and Board of Health.

Bridgeport, Conn.
Building Commissioner and Inspector.

Calgary, Can.
*Supt. of Buildings.

Cambridge, Mass.
Building Department.

Chicago, Ill.

Cincinnati, Ohio

Columbus, Ohio
Health and Bldg. Depts.

Dayton, Ohio
Chief Inspector of Division of Bldg. Inspection.

Denver, Colo.
Department of Building Inspection.

Detroit, Mich.

Duluth, Minn.

Indianapolis, Ind.

Louisville, Ky.

Lowell, Mass.
Dept. of Bldgs. composed of Inspector of Bldgs, deputy Inspector of Bldgs., clerk, etc.

Memphis, Tenn.
Department of Building.

Milwaukee, Wis.
Inspector of Buildings.

Minneapolis, Minn.
Inspector of Buildings, Dept. of Health.

New Orleans, La.
City Engineer and Police Department.

Omaha, Neb.

Paterson, N. J.
Department of Buildings.

Pennsylvania (Model Law).

Pittsburgh, Pa.
Department of Public Safety, Bureau of Health of each city, Bureau of Building Inspection of each City.

Portland, Ore.
Department of Buildings.

Providence, R. I.
Board of Health and Building Department

Richmond, Va.
Bldg. Inspector and in case of appeal the Board of Public Safety.

Rochester, N. Y.
The Bureau of Buildings.

St. Paul, Minn.
Commissioner of Public Works.

Seattle, Wash.

Toledo, Ohio
Building Inspector.

Toronto, Can.

Washington, D. C.

Worcester, Mass.
Superintendent of Public Buildings.

Proposed Ordinances

THE following proposed Housing Ordinance for the City of St. Paul is the result of an intensive study of housing legislation in thirty-one cities and states throughout the country, and is based mainly upon the Codes of the State of Michigan and the City of Minneapolis.

In the preparation of this Ordinance, the Director of the Survey secured the advice and co-operation lasting thru many days, of representatives from the Real Estate Board, the Builders' Exchange, the Plumbers' Association, architects, the Building Inspector of St. Paul, the Building Inspector of Minneapolis and such others as were willing to give their services and were intelligently informed regarding the needs of St. Paul.

The Housing Commission in giving its endorsement to this Ordinance by no means considers its provisions ideal, but in so far as precedent and interests of real estate owners and tenants, the powers of the City to enact legislation, and the available machinery for such enforcement are concerned this bill is considered as nearly adequate as is possible under present circumstances. Wherever feasible this Ordinance is in accord with the provisions contained in the Housing Code of the City of Minneapolis, especially on such matters as would protect the real estate interests of St. Paul in competition with similar interests in the neighboring city.

Ordinances

ORDINANCE NO.

AN ORDINANCE REGULATING THE CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, INSPECTION, MAINTENANCE, AND SAFEGUARDING OF BUILDINGS, AND THE SAFEGUARDING OF THE HEALTH OF OCCUPANTS BY THE REGULATION OF SANITARY PROVISIONS AND THE PROTECTION OF REAL PROPERTY USED FOR DWELLING PURPOSES IN THE CITY OF ST. PAUL.

The Council of the City of St. Paul does ordain:

ARTICLE I.

GENERAL PROVISIONS.

Sec. 1. Title of the Ordinance.

This Ordinance shall be known as the **Housing Ordinance of the City of St. Paul,** and shall apply to all dwellings and their surroundings.

Sec. 2. Definitions.

All words used in this Ordinance hereinafter defined shall be interpreted according to the letter of the definitions provided in this section.

(a) Whenever in this Ordinance the present tense is used it shall include the future tense. The "masculine gender" shall include the feminine and neuter genders. The "singular number" shall include the plural. The word "person" includes an association, partnership or corporation as well as a natural person. The word "converted" shall mean either a change of character in occupancy or in construction. The words "is occupied" applying to any building shall be construed as if followed by the words "or is intended, arranged, or designed to be occupied."

Whenever the word "shall" is used it shall be considered as mandatory and not permissive.

(b) "A dwelling" is to be construed as meaning any building or portion of building occupied, or intended to be occupied in whole or in part as a home, residence or sleeping place of one or more human beings, either permanently or temporarily.

Sec. 3. For the purpose of this Ordinance dwellings are divided into the following classes:

1. Private dwellings.
2. Two family or duplex dwellings.
3. Multiple dwellings.

Classes of Multiple Dwellings.

All multiple dwellings for the purpose of this Ordinance shall be divided into two classes: Class "A," and Class "B."

Class A. Multiple dwellings of Class A are dwellings which are occupied more or less permanently for residence purposes by several families and in which the rooms are occupied in apartments, suites or groups. This class includes tenement houses, flats, apartment houses, apartment hotels, bachelor apartments, studio apartments, kitchenette apartments, and all other dwellings similarly occupied whether specifically enumerated herein or not.

Class B. Multiple dwellings of Class B are dwellings which are occupied, as a rule transiently, as the more or less temporary abiding place of individuals who are lodged, with or without meals, and in which as a rule the rooms are occupied singly. This class includes hotels, lodging houses, boarding houses, furnished room houses, club houses, convents, asylums, hospitals, jails, and all other dwellings similarly occupied whether specifically enumerated herein or not, except fire engine houses.

(1) Hotel. A "hotel" is a multiple dwelling of Class B in which persons are lodged for hire and in which there are more than thirty sleeping rooms, a public dining room for the accommodation of at least fifty (50) guests, and a general kitchen.

(2) Mixed Occupancy. In cases of mixed occupancy where a building is occupied in part as a dwelling the part so occupied shall be deemed a dwelling for the purposes of this Ordinance and shall comply with the provisions thereof relative to multiple dwellings.

(3) Yards. A "rear yard" is an open unoccupied space on the same lot with a dwelling, between the extreme rear line of the lot and the extreme rear line of the house and extending across the entire width of the lot. A yard between the extreme front line of the house and the front line of the lot and extending across the entire width of the lot is a "front yard." A yard between the extreme side line of the house and the side line of the lot and which extends from the front yard to the rear yard is a "side yard."

(4) Courts. A "court" is an open unoccupied space, other than a yard, on the same lot with a dwelling. A court not extending to the street or front or rear yard is an inner court. A court extending to the street or front yard or rear yard is an outer court.

(5) Corner and Inside Lots. A "corner lot" is a lot of which at least two adjacent sides abut for their full length upon a street. A lot other than a corner lot is an "inside lot."

(6) Front, Rear, and Depth of Lot. The front of a lot is that boundary line which borders on the street. In case of a corner lot the owner may elect by statement on his plans either street boundary line as the front. The rear of a lot is the side opposite to the front. In the case of a triangular or gore lot the rear is the boundary line not bordering on a street. The depth of a lot is the dimension measured from the front of the lot to the extreme rear line of the lot. In the case of irregular shaped lots the mean depth shall be taken.

(7) Public Hall. A "public hall" is a hall, corridor or passageway not within the exclusive control of one family.

(8) Stair Hall. A "stair hall" is a public hall and includes the stairs, stair landings and those portions of the building through which it is necessary to pass in going between the entrance floor and the top floor.

(9) Basement, Cellar, Attic. (a) A "basement" is a story partly underground but having at least one-half of its height above the curb level, and also one-half of its height above the highest level of the adjoining ground. A basement shall be counted as a story, except that a basement, the ceiling of which does not extend for more than five feet above the curb level or above the highest level of the adjoining ground shall not be counted as a story.

(b) A "cellar" is a story having more than one-half of its height below the curb level, or below the highest level of the adjoining ground. A cellar shall not be counted as a story for the purposes of height measurement. If any part of a story is in that part the equivalent of a basement or cellar, the provisions of this ordinance relative to basements and cellars shall apply to such part of said story.

(c) In the case of private-dwellings and two-family-dwellings an attic, or story in a sloping roof shall not be counted as a story, except that no such attic shall contain a kitchen or dining room or be occupied for living purposes as the domicile of a family; the use of such attic shall be confined strictly to the use of the two families occupying the first and second floors of such dwelling. In the case of multiple-dwellings an attic shall be counted as a story.

(10) Height. The "height" of a dwelling is the perpendicular distance measured in a straight line from the curb level to the highest point of the roof beams in the case of flat roofs and to the average of the height of the gable in the case of pitched roofs, the measurements in all cases to be taken through the center of the front of the house. Where a dwelling is situated on a terrace above or below the curb level such height shall be measured from the level of the adjoining ground. Where a dwelling is on a corner lot and there is more than one grade or level, the measurements shall be taken through the center of the front or side on the street having the lowest elevation.

(11) Curb Level. The "curb level" is the level of the established curb in front of the building measured at the center of such front. Where no curb has been established the city engineer shall establish such curb level or its equivalent for the purposes of this Ordinance.

(12) Occupied Spaces. Outside stairways, fire-escapes, fire towers, porches, platforms, balconies, boiler flues and other projections shall be considered as part of the building and not as a part of the yards or courts or unoccupied spaces. This provision shall not apply to unenclosed outside porches not exceeding one story in height which do not extend into the front yard a greater distance than twelve (12) feet from the front walls of the building. A porch which does not extend into the side yard a greater distance than 6 feet from the side wall of the building nor exceed 12 feet in its other horizontal dimension, or to cornices not exceeding two (2) feet in width. A rear porch not exceeding six (6) feet in width shall be considered a part of the building to the extent of six (6) feet and in no case shall the excess over six (6) feet permit the shortening of the yard beyond the limits required in this ordinance.

(13) Nuisance. The word "nuisance" shall be held to embrace public nuisance as known at common law or in equity jurisprudence; and whatever is dangerous to human life or prejudicial to health; whatever dwelling is overcrowded with occupants, or is not sufficiently ventilated, sewered, drained, cleaned or lighted, in reference to its intended or actual use; and whatever renders the air or human food or drink unwholesome, are also severally, in contemplation of this Ordinance, nuisances; and all such nuisances are hereby declared prejudicial to the public health.

(14) Private Garage. A private garage shall mean a structure providing accommodations for not more than four (4) automobiles and in no case shall such automobiles be used for other than private purposes, except that one such automobile may be devoted to business purposes with the permission of the Building Inspector.

Sec. 4. Buildings Converted or Altered. A building not a dwelling, if hereafter converted or altered to such use shall thereupon become subject to all the provisions of this Ordinance relative to dwellings hereafter erected. A dwelling of one class if hereafter altered or converted to another class shall thereupon become subject to all the provisions of this Ordinance relative to such class.

Sec. 5. Alterations and Change in Occupancy. No dwelling hereafter erected shall at any time be altered so as to be in violation of any provision of this Ordinance. And no dwelling erected prior to the passage of this Ordinance shall at any time be altered so as to be in violation of those provisions of this Ordinance applicable to such dwelling. If any dwelling or any part thereof is occupied by more families than provided in this Ordinance, or is erected, altered or occupied contrary to the provisions of this Ordinance, such dwelling shall be deemed a nuisance, and the health officer shall cause such dwelling to be vacated. And such dwelling shall not again be occupied until it or its occupation as the case may be, has been made to conform to the provisions of this Ordinance.

Sec. 6. Dwellings Moved. If any dwelling be hereafter moved from one lot to another it shall thereupon be made to conform to all the provisions of this Ordinance relative to dwellings hereafter erected except as to size and height of rooms and window area; provided, however, that no room in such dwelling shall be occupied for living purposes unless it shall have a window of an area of not less than eight square feet opening directly upon the street or upon a yard or court of the dimensions specified in this act relative to dwellings hereafter erected.

Sec. 7. Dwellings Damaged. If a dwelling be damaged by fire or other cause to the extent of not more than two-thirds of its value, exclusive of the value of the foundations, such dwelling in being repaired or rebuilt need not comply with the provisions of this ordinance relative to dwellings hereafter erected. If damaged to the extent of more than two-thirds of such value, it shall not be repaired or rebuilt except in conformity with the provisions of this ordinace relative to dwellings hereafter erected. Where an estimate of damage to buildings is given by the inspector of buildings, an appeal to arbitration shall be allowed to parties believing themselves injured or wronged by the estimate or decision of the inspector of buildings in any such case, as follows:

Any person desiring to make such appeal shall do so within fifteen days after written notice of the decision or order of the inspector of buildings shall have been given him. The request for arbitration shall be in writing, and shall state the object of the proposed arbitration and the name of the person who is to represent the appellant as arbitrator. The inspector of buildings shall thereupon state to the appellant the cost of such arbitration, and such appellant shall, within twenty-four hours from the time of filing the original request for arbitration, deposit with the inspector of buildings the sum of money required for defraying the expenses of the same, which sum shall in each case be fixed by inspector in proportion to the difficulty and importance of the case, but shall in no case be more than the cost of similar expert service in the course of ordinary business of private individuals or corporations.

As soon as such sum of money shall have been deposited with him, the inspector of buildings shall appoint an arbitrator to represent the city, who shall, together with the arbitrator appointed by the appellant, if they cannot agree, select a third arbitrator, and the decision of any two of these arbitrators in writing shall, after investigation of the matter in question, be final and binding upon the appellant as well as upon the city.

The arbitrators themselves, before entering upon the discharge of their duties, shall be placed under oath to the effect that they are unprejudiced as to the matter in question and that they will faithfully discharge the duties of their position. They shall have the power to call witnesses who shall be placed under oath, and their decision or award shall be rendered in writing, both to the inspector of buildings and to the appellant.

The fee deposited by the appellant with the inspector of buildings shall be paid by the inspector of buildings to the arbitrators upon the rendering of their report, and shall be in full of all costs incident to the arbitration; but should the decision of said board of arbitration be rendered against the inspector of buildings, then the money deposited by the aforesaid appellant shall be returned to him, and the entire cost of such arbitration shall be paid by the city. Provided, however, that whenever the decision of the inspector of buildings upon the safety of any building or part thereof or appurtenances connected therewith is made in a case so urgent, in his opinion, that failure at once properly to carry out his orders to demolish or strengthen such building or part thereof or to alter or change any of the appurtenances connected therewith may endanger life or limb, the decision of the inspector of buildings shall be absolute and final.

Sec. 8. Sewer Connection and Water Supply. The provisions of this act with reference to sewer connections and water supply shall be deemed to apply only where there is a sewer and water main in the street on which the dwelling is located, and which extend as far as the lot or plot of ground on which the dwelling is situated.

Wherever there is no sewer in the street on which a dwelling is situated, but there is a water main, the required plumbing for the dwelling shall be connected to a cesspool at least twenty feet in depth and four feet by four feet in size, provided that the nature of the soil is such, in the opinion of the in-

spector of buildings, that such cesspool can be made properly to take care of the sewage from said plumbing system. Wherever it is found by said inspector to be impracticable owing to the nature of the soil adjacent to said dwelling to construct such cesspool, a waterproof privy vault or other approved sanitary privy or similar device may be used temporarily for such dwelling until such time as a sewer is provided in the street adjacent to such dwellings. Whenever a sewer is so provided the owner of the dwelling shall at once install a plumbing system in the dwelling and connect it to the sewer. Cesspools shall be placed not less than twenty feet from the building whenever practicable.

ARTICLE II.

DWELLINGS HEREAFTER ERECTED.

In this article will be found the provisions which must be observed when a person proposes to build a new dwelling or to convert or alter to such purposes a building which is not a dwelling.

TITLE 1.

LIGHT AND VENTILATION.

Sec. 9. Percentage of Lot Occupied. No dwelling hereafter erected shall occupy, either alone or with other buildings, a greater percentage of the area of the lot than as follows:

(a) In the case of corner lots with streets on three sides, not more than ninety per centum;

(b) In the case of other corner lots, not more than eighty per centum;

(c) In the case of inside lots, not more than sixty-five per centum.

The measurements shall be taken at the ground level except that in the case of multiple dwellings where there are stores or shops on the entrance story, the measurements may be taken at the second story floor level, but in no case shall such part story be used for dwelling purposes. No measurements of lot area shall include any portion of any street. The measurements of lot area for the purposes of this section may be taken to the middle line of the alley where a public alley immediately abuts the lot at the rear or side and extends across its entire width or length, as the case may be. Any portion of a corner lot distant more than eighty feet from the outside side line of the lot, or from said side line extended in the same direction, shall be treated as an inside lot. The provisions of this section shall not apply to hotels.

Sec. 10. Height. No dwelling hereafter erected shall exceed in height the width of the widest street upon which it abuts nor in any case shall it exceed six stories and basement nor seventy-five feet in height. Such width of street shall be measured from front lot line. Where a street borders a public place, public park or navigable body of water, the width of the street is the mean width of such street plus the width, measured at right angles to the street line, of such public place, public park or body of water to opposite front lot line. No dwelling shall hereafter be erected upon any street or alley less than thirty feet in width. The provisions of this section shall not apply to hotels.

Sec. 11. Rear Yards. Immediately behind every dwelling hereafter erected there shall be, except as hereinafter provided, a rear yard extending across the entire width of the lot. Such yard shall be at every point open and unobstructed from the ground to the sky. Every part of such yard shall be directly accessible from every other part thereof. The depth of said yard shall be measured at right angles from the line of the extreme rear part of the dwelling toward the center of the rear lot line. In the case of an inside lot the rear yard space shall in no case be less than fifteen (15) feet deep, and five (5) feet additional for each story of the dwelling on said lot above the first. In case of a corner lot abutting on two streets, with no building facing the street upon which the lot abuts for the greater distance, the rear yard space shall in no case be less than ten feet deep, and five (5) feet additional for each story of the dwelling on said lot above the first. In the case of a corner lot abutting on two streets, with one or more dwellings facing the street upon which the lot abuts for the greater distance, the wall farthest distant, or substantially parallel, to such street shall, for the purpose of this section be deemed the rear wall of such dwelling or dwellings and the yard space between such rear wall and the line of the lot parallel or substantially parallel, to such street shall in no case be less than six feet for a two story dwelling and three feet additional for each story above the second. In case of corner lots abutting on three streets, not counting the alley as a street, the rear yard need not extend across the full width of the lot, but only to its median line. Any portion of a corner lot distant more than eighty (80) feet from the corner line, shall be treated as an inside lot. A front yard may be of any depth. The foregoing provisions of this section shall not apply to hotels.

Except that in the case of multiple dwellings of Class A hereafter erected known as "kitchenettes" in which the apartments are arranged in suites of not more than three rooms, kitchen and bath, and in which central heating and janitor service is furnished by the owner, the rear yard may be twenty-two and one-half feet in depth irrespective of the depth of the lot for a three-story dwelling and such depth shall increase three feet for each additional

story above three stories, but shall never be less than twenty-two and one-half feet.

Sec. 12. Side Yards; Distance Between Adjoining Buildings. In order to insure adequate light and ventilation and reduce the conflagration hazard and preserve the amenities of residential districts, no dwelling hereafter erected shall approach nearer to a side lot line than as prescribed in this section. The space between any such dwelling and the side lot line shall be deemed a side yard and shall be as follows:

(a) In the case of a dwelling hereafter erected one story in height such space shall not be less than four feet from the side wall of said dwelling to the side lot line.

(b) In the case of a dwelling hereafter erected two stories in height such space shall not be less than five feet to the side lot line; if said dwelling is three stories in height, such space shall be not less than seven feet to the side lot line; and such space shall increase two feet in width for each additional story.

(c) In the case of private-dwellings and of two-family dwellings hereafter erected, such space shall be not less than three feet from the side wall of the dwelling to the side lot line. Provided, however, that in no case shall the combined width of side yards for any such dwelling be less than double the width as prescribed in sub-division (a) and (b) of this section for a building of like height.

(d) All of the above-mentioned side yards shall be at every point open and unobstructed from the ground to the sky, except as provided in subdivision 12 of section 3 of this ordinance.

Sec. 13. Courts.

"Inner Courts" of all new apartment hotels, apartment houses, flat buildings, dormitories or tenement houses, as defined in this section, shall have minimum widths at every point, and minimum areas, as follows:

Height of Court.	Least width in feet.	Least area in sq. feet.
1 story	6	100
2 stories	8	120
3 stories	10	160
4 stories	12	160
5 stories	14	260
6 stories	16	400
7 stories	20	625
8 stories	24	840

The height of a court shall be the number of stories above the lowest story having habitable rooms with windows opening on to such court through its enclosing walls.

"Outer Courts" of all new apartment hotels, apartment houses, flat buildings, dormitories, and tenement houses, as defined in this section, shall have minimum widths at every point, from the side walls of any such building, extending to the street or front yard or rear yard, equal to the following:

Height of Building, Stories	Least width of Court in feet.
1	4
1½	4
2	5
3	7
4	8
5	8
6	8
7	8
8 and over	8

The length of a court shall never be greater than 4 times its width. The width of all courts adjoining the lot line shall be measured to the lot line and not to an opposite building.

"Inner Courts" of private dwellings and two family dwellings shall have a minimum width at every point from the side walls of any such building extending to the street or front yard or rear yard equal to the following:

On West and North side of lot:

Stories.	Least width of Court in feet.
1	3
1½	3
2	3

On South and East side line of lot:

Stories.	Least width of Court in feet.
1	5
1½	5
2	7

Sec. 14. Courts Open at the Top. No court of a dwelling hereafter erected shall be covered by a roof or skylight. Every such court shall be at every point open from the ground to the sky, except that in the case of multiple dwellings where there are stores or shops on the entrance story, the courts may start at the top of such entrance story and such courts may be roofed over by a skylight provided the skylight completely covers the court and is equipped with ventilators having a minimum opening equivalent to forty-four square inches for each story in the height of said court and also with fixed louvres having a minimum opening equal to the superficial area of said court, and such openings into said court, shall be kept open and unobstructed at all times. The provisions of this section as to courts starting from the ground shall not apply to hotels.

Sec. 15. Air Intakes. In all dwellings hereafter erected every inner court extending through more than one (1) story shall be provided with a hori-

zontal air intake at the bottom. Such intake shall always communicate directly with the street or with the front yard or rear yard and shall consist of a passage way not less than three (3) feet wide and seven (7) feet high, which shall be left open, or be provided with an open gate at each end.

Sec. 16. Angles in Courts. Nothing contained in the foregoing sections concerning courts shall be construed as preventing the cutting off of the corners of said courts: Provided, that the running length of the wall across the angle of such corner does not exceed seven (7) feet.

Sec. 17. Buildings on Same Lot With a Dwelling. If any building is hereafter placed on the same lot with a dwelling there shall always be maintained between the said buildings an open and unoccupied space extending upwards from the ground. If such buildings are placed at the side of each other the space between them shall conform to the provisions of section 12 of this ordinance relating to side yards, but shall be twice the minimum therein required. If such buildings are placed one at the rear of the other the space between them shall be the same as that prescribed in section eleven for rear yards. In all cases the height of the highest building on the lot shall regulate the dimensions. No building of any kind shall be hereafter placed upon the same lot with a dwelling so as to decrease the minimum sizes of courts or yards as hereinbefore prescribed. No building shall hereafter be placed upon a lot so that there shall be a dwelling at the rear of another building on the same lot without a frontage on a street other than an alley.

A private garage or private stable may be built at the rear of a lot on which there is a dwelling at the front. Such garage or stable shall not exceed two stories in height, and may have living rooms therein for the use solely of a household employe, or member of his family, of the occupant of the dwelling on the front of the lot. If so occupied, the garage or stable in addition to complying with the provisions of this Ordinance shall have an entrance from the outside of the building without passing through the garage or stable. In case of such garages which do not exceed one story in height, the depth of the rear yard shall be measured to the rear lot line, as the case may be, as provided in the Ordinance; but no such garage shall in any case approach nearer to the rear wall of the dwelling than fifteen (15) feet. In all other cases the rear yard shall be measured from the rear wall of the dwelling to the nearest wall of the building at the rear of the lot. If any dwelling is hereafter erected upon any lot upon which there is already another building, it shall comply with the provisions of this Ordinance, and in addition the space between the said building and the said dwelling shall be of such size and arranged in such manner as is prescribed in this section, the height of the highest building on the lot to regulate the dimensions.

Nothing in this section shall be construed as prohibiting the construction of garage as part of the dwelling. Any other structures on the rear of a lot shall be subject to the restrictions that apply to stables and garages.

Sec. 18. Rooms, Lighting and Ventilation Of. In every dwelling hereafter erected every room shall have at least one (1) window opening directly upon the street, or a public alley or other public space at least sixteen (16) feet in width, or upon a yard or a court of the dimensions specified in this Ordinance and located on the same lot, and such window shall be so located as to properly light all portions of such rooms. This provision shall not, however, apply to rooms used as art galleries, swimming pools, gymnasiums, squash courts or for similar purposes, provided such rooms are adequately lighted and ventilated.

Sec. 19. Windows in Rooms. In every dwelling hereafter erected the total window area in each room shall be at least one-eighth (1/8) of the superficial floor area of the room, and the whole window shall be made so as to open. This shall not prohibit the use of sliding sash. At least one (1) such window shall be not less than twelve (12) square feet in area between the stop-beads. In multiple-dwellings the top of at least one (1) window shall be not less than seven (7) feet above the floor.

Provided, however, that where an open porch adjoins a room, one-half of the windows opening upon such porch may be considered as part of the total window area required for such room.

Sec. 20. Rooms, Size Of. In every dwelling hereafter erected all rooms, except water-closet compartments and bathrooms and pantries shall be of the following minimum sizes: Every room shall contain at least ninety (90) square feet of floor area except that kitchenettes may be fifty (50) square feet in area; no room except kitchenettes shall be in any part less than seven (7) feet wide. (In multiple-dwellings of Class A in each apartment, group or suite of rooms there shall be at least one (1) room containing not less than one hundred fifty (150) square feet of floor area.)

Sec. 21. Rooms, Height Of. No room in a private dwelling or two-family dwelling hereafter erected shall be in any part less than eight (8) feet high from the finished floor to the finished ceiling, except that an attic room in such private and two-family dwelling need be but seven (7)

feet six (6) inches in but one-half of its area, but at no point less than four (4) feet in height. No room in a multiple-dwelling hereafter erected shall be in any part less than eight (8) feet high from the finished floor to the finished ceiling.

Sec. 22. Alcoves and Alcove Rooms for Sleeping Purposes or as Separate Rooms. In every dwelling hereafter erected an alcove in any room shall be separately lighted and ventilated as provided for rooms in the foregoing sections. Such alcove shall be not less in area than as provided in section 20. No part of any room in a dwelling hereafter erected shall be enclosed or subdivided at any time wholly or in part by a curtain, portiere, fixed or movable partition or other contrivance or device, unless such part of the room so enclosed or subdivided shall contain a separate window as herein required, and shall have a floor area of not less than is provided in section 20.

Sec. 23. Privacy. In every dwelling hereafter erected, access to every living room and to every bedroom and to at least one (1) water-closet compartment shall be had without passing through a bedroom.

Sec. 24. Water-Closet Compartments and Bath Rooms, Lighting and Ventilation Of. In every dwelling hereafter erected, every water-closet compartment and bath room shall have at least one (1) window opening directly upon the street, or upon a yard or court of the dimensions specified in this article, or if located immediately beneath the roof, a ventilating skylight, open to the sky with an opening not less than six square feet in area in each toilet, may be used in lieu of the windows required by this section. No such window shall be less in size than three (3) square feet between stop-beads, and the aggregate area of windows for each water-closet compartment shall be not less than six (6) square feet between stop-beads. Such windows shall be so located as to properly light all portions of such compartments. Every such window shall be made so as to open in all its parts.

"The above provision shall not apply to hotels that have a system of forced ventilation so constructed as entirely to change the air in every bath room, toilet room or water closet compartment every fifteen minutes."

Sec. 25. Public Halls. In every dwelling hereafter erected every public hall shall have at each story at least one (1) window opening directly upon the street or upon a yard or court of the dimensions specified in this article and located on the same lot. Any part of a public hall which is offset or recessed more than five (5) feet or is shut off from any other part of said hall shall be deemed a separate hall within the meaning of this section, and shall be separately lighted and ventilated.

Sec. 26. Windows and Skylights for Public Halls. In multiple-dwellings hereafter erected one (1) at least of the windows provided to light each public hall or part thereof shall have at least twelve (12) square feet or glazed area.

Sec. 27. Windows for Stair Halls, Size Of. In every multiple-dwelling hereafter erected there shall be provided for each story at least one (1) window to light and ventilate each stair hall which shall have at least ten (10) square feet of glazed area. A sash door opening to the outer air shall be deemed the equivalent of a window in this and the two (2) foregoing sections, provided that such door contains the amount of glass surface prescribed for such windows.

Sec. 28. Screens. Between the 15th of May and the 15th of October all windows of rooms used for human occupancy shall be provided by the owners with proper screens, and all windows and doors in halls and basements or cellars opening into the outer air shall also be provided by the owners with screens. Adequate screens should be so constructed and placed as to prevent ingress of flies, mosquitoes and other insects to the interior of the building. This provision shall not apply to windows and doors located above the fourth floor of any building. All barns or stables located within one hundred (100) feet of any dwelling which shall be used for the housing of horses or other animals shall also be provided with screens which would prevent the ingress and egress of flies, mosquitoes and other insects.

Sec. 29. Outside Porches. In dwellings hereafter erected outside porches shall not be so located as to interfere with or diminish the light or ventilation required by this Ordinance. The term "outside porches" shall include outside platforms, balconies and stairways. All such outside porches shall be considered as part of the building, and not as part of the yards or courts or other unoccupied area.

TITLE 2.

SANITATION.

Sec. 30. Cellar Rooms. In dwellings hereafter erected no room in the cellar shall be occupied for living purposes.

Sec. 31. Basement Rooms. In dwellings hereafter erected no room in the basement shall be occupied for living purposes, except by the janitor of such dwelling and the members of his family. In addition to the other requirements of this ordinance, such rooms shall have sufficient light and ventila-

tion, shall be well drained and dry and shall be fit for human habitation.

Sec. 32. Cellars, Water-Proofing and Lighting. Every dwelling hereafter erected shall have a basement, cellar, or excavated space under the entire entrance floor at least three (3) feet in depth, or shall be elevated above the ground so that there will be a clear air space of at least twenty-four (24) inches between the top of the ground and the bottom of said floor so as to insure ventilation and protection from dampness. Such space shall in all cases be enclosed but provided with ample ventilation and properly drained. Every dwelling hereafter erected shall have all walls below the ground level and also the cellar or lowest floor damp-proof and water-proof. When necessary to make such walls and floors damp-proof and water-proof, the damp-proofing and water-proofing shall run through the walls and up the same as high as the ground level and shall be continued throughout the floors, and the said cellar or lowest floor shall be properly constructed so as to prevent dampness or water from entering. All cellars and basements in dwellings hereafter erected shall be properly lighted and ventilated. In every dwelling hereafter erected when the foundation, basement, or cellar walls are of poured concrete construction, forms shall be built on each side of such foundations or walls from the base to the top in order to insure uniform width.

Sec. 33. Courts, Areas and Yards. In every dwelling hereafter erected, all courts, areas and yards shall be properly graded and drained, and when required by the health officer they shall be properly paved in whole or in part as may be appropriate.

Sec. 34. Water Supply. In every dwelling hereafter erected where water mains are accessible there shall be a proper sink or wash bowl with running water, exclusive of any sink in the cellar. In two-family dwellings and in multiple-dwellings of Class A there shall be such a sink or wash bowl in each apartment, suite or group of rooms.

Sec. 35. Water-Closet Accommodations. In every dwelling hereafter erected there shall be a separate water-closet. Each such water-closet shall be placed in a compartment completely separated from every other water-closet; such compartment shall be not less than three (3) feet wide, and shall be enclosed with partitions which shall extend to the ceiling and which shall not be of wood or other absorbent material. Every such compartment shall have a window opening directly upon the street or upon a yard or court of the minimum sizes prescribed by this Ordinance and located upon the same lot. Nothing in this section contained shall be construed so as to prohibit a general toilet room containing several water-closet compartments separated from each other by dwarf partitions, provided such toilet room is adequately lighted and ventilated to the outer air and that such water-closets are supplemental to the water-closet accommodations required by other provisions of this section for the tenants of the said house. No water-closet shall be placed out of doors. No water-closet fixtures shall be enclosed with any woodwork. No drip trays shall be permitted on any water-closet. No water-closet shall be placed in a cellar except with written permit from the health-officer unless it is an extra water-closet in a private dwelling and is well lighted and ventilated by a window to the outer air. In two-family dwellings and in multiple-dwellings of Class A hereafter erected there shall be for each family a separate water-closet constructed and arranged as above provided and located within each apartment, suite or group of rooms. In multiple-dwellings of Class B hereafter erected there shall be provided at least one (1) water-closet for every fifteen (15) occupants or fraction threof. Every water-closet compartment hereafter placed in any dwelling shall be provided with gas or electric light for lighting the same at night unless no gas or electric light is available in such buildings. In two-family and multiple dwellings hereafter erected the floor of every such water-closet compartment shall be made water-proof with asphalt, tile, stone, terrazzo or some other non-absorbent water-proof material; and such water-proofing shall extend at least six (6) inches above the floor so that the said floor can be washed or flushed out without leaking.

Sec. 36. Sewer Connection. No multiple-dwelling shall hereafter be erected on any street unless there is city water supply accessible thereto, nor unless there is a public sewer in such street, or a private sewer connecting directly with a public sewer, or a septic tank sewage disposal system approved by the Health Office and every such multiple-dwelling shall have its plumbing system connected with the city water supply and with a public sewer before such multiple-dwelling is occupied. No cesspool or vault or similar means of sewage disposal shall be used in connection with any dwelling where connection with a public sewer is practicable.

Sec. 37. Plumbing. In every dwelling hereafter erected no plumbing fixture shall be enclosed with woodwork, but the space underneath shall be left entirely open. Plumbing pipes shall be exposed when so required by the health officer. All plumbing work shall be sanitary in every particular and, except as otherwise specified in this Ordinance shall be in accordance with the plumbing regulations of this city.

TITLE 3.

FIRE PROTECTION.

Sec. 38. Fireproof Dwelling, When Required. No dwelling shall hereafter be erected exceeding three stories in height, unless it shall be a fireproof dwelling; the building, however, may step up to follow the grade, provided no part of it is over three stories in height.

Sec. 39. Means of Egress. Every multiple-dwelling hereafter erected exceeding one story in height shall have at least two independent ways of egress which shall be located remote from each other, and shall extend from the entrance floor to the top floor, and in the case of flat-roofed multiple-dwellings exceeding two stories in height shall extend to the roof. The stairs and public halls therein shall each be at least three feet six inches wide in the clear. The two ways of egress shall be flights of stairs, either inside or outside, constructed and arranged as provided in sections — and — of this act. In multiple-dwellings of Class A, except in kitchenette apartments arranged in suites of not more than three rooms, kitchen and bath, the second way of egress shall be directly accessible to each apartment, group or suite of rooms without having to pass through the first way of egress. In multiple-dwellings of Class B and in kitchenette apartments, as above described, the second way of egress shall be directly from a public hall.

Sec. 40. Fire-escapes. All fire-escapes hereafter erected on multiple-dwellings shall be located and constructed as in this section required. Such fire-escapes shall be located at each story the floor of which is ten or more feet above the ground. Access to fire-escapes shall not be obstructed in any way. No fire-escapes shall be placed in an inner court. Fire-escapes may project into the public highway to a distance not greater than six feet beyond the building line. All fire-escapes shall consist of outside open iron, stone or concrete balconies and stairways. All balconies shall not be less than three feet in width. All stairways shall be placed at an angle of not more than forty-five degrees to the horizontal wherever practicable and in no case to exceed fifty degrees to the horizontal, with flat open steps not less than seven inches in width and twenty-four inches in length and with a rise of not more than eight inches. The openings for stairways in all balconies shall be not less than twenty-four by seventy inches, and shall have no covers of any kind. The balcony on the top floor, except in the case of a balcony on the street or in the case of a peaked-roofed house, shall be provided with a stairs or with a goose-neck ladder leading from said balcony to and above the roof and properly fastened thereto. A drop or stationary ladder or stairs shall be provided from the lowest balcony of sufficient length to reach a safe landing place beneath. All fire-escapes shall be constructed and erected to sustain safely in all their parts a live load of one hundred and twenty pounds to the superficial foot, and if of iron shall receive not less than two coats of good paint, one in the shop and one after erection.

Sec. 41. Roof Egress; Scuttles and Bulkheads. Every flat-roofed multiple-dwelling hereafter erected exceeding one story in height or occupied by more than two families on any floor, shall have in the roof a bulkhead or scuttle not less than two feet by three feet in size. Such scuttle or bulkhead shall be fire-proof or covered with metal on the outside. Every flat-roofed multiple-dwelling hereafter erected exceeding two stories in height shall be provided with stairs leading to such scuttle or bulkhead and easily accessible to all occupants of the building. Every two-story flat-roofed multiple-dwelling hereafter erected having two or more families on any floor shall be provided with stairs or stationary ladder leading to such scuttle or bulkhead and easily accessible to all occupants of the building. No scuttle or bulkhead shall be located in a closet or room, but shall be located in the ceiling of the public hall on the top floor, and access through the same shall be direct and unobstructed.

Sec. 42. Stairs. In multiple-dwellings hereafter erected all stairs shall be constructed with a rise of not more than eight inches and with treads not less than ten inches wide and not less than three feet six inches long in the clear, except that multiple-dwellings not exceeding two stories in height or having not more than two families on any floor, may have stairs with treads not less than three feet long in the clear. Winding stairs shall not be used. In multiple-dwellings hereafter erected exceeding two stories in height or occupied by more than two families on any floor, one of the stairways shall be constructed of fire-proof material throughout. The risers, strings and balusters shall be of metal, concrete or stone. The treads shall be of metal, slate, concrete or stone, or of hardwood not less than one and one-half inches thick. Wooden hand-rails to stairs may be used if constructed of hardwood.

Sec. 43. Stair Halls. In multiple-dwellings hereafter erected exceeding two stories in height or occupied by more than two families on any floor, the fire-proof stairs required by the preceding section shall be enclosed on all sides with walls of brick not less than eight inches thick. The floors and ceilings of such fire-proof stair halls shall be of fire-proof construction. No wooden flooring shall be used. The doors opening from such stair halls shall be fire-proof, self-closing and shall open outward. There shall be no transom or sash or sim-

ilar opening from such stair hall to any other part of the dwelling, except that such stair hall shall be shut off from all non-fire-proof portions of the public halls and from all other non-fire-proof parts of the building on each story by a self-closing fire-proof sash door with transparent wire-glass therein; on either side and above such door there may be fixed fire-proof transoms and sash with transparent wire-glass therein.

Sec. 44. Entrance Halls. Every entrance hall in a multiple-dwelling hereafter erected shall be at least five feet six inches wide in the clear, and shall comply with all the conditions of the preceding sections as to the construction of stair halls. In every multiple-dwelling hereafter erected, access shall be had from the street or alley to the rear yard either in a direct line or through a court or side yard.

Sec. 45. Dumb-waiters, Elevators and Shafts. In multiple-dwellings hereafter erected all vertical shafts, whether for dumb-waiter, elevator or other purposes, shall be constructed of fire-proof material, with fire-proof doors at all openings at each story, including the cellar. In the case of dumb-waiters such doors shall be self-closing. No elevator shall be permitted in the well-hole of stairs, but every elevator shall be completely separated from the stairs by fire-proof walls enclosing the same.

Sec. 46. Cellar Stairs. In multiple-dwellings of Class A hereafter erected which exceed two stories in height or which are occupied by more than two families on any floor, all inside stairs communicating between the cellar or basement, and the floor next above shall be of fire-proof construction with self-closing fire-proof door at the top and bottom and shall be enclosed with brick walls not less than eight inches thick; if located underneath the stairs leading to the upper stories, the soffit of such stairs shall be covered with fire-proof material.

Sec. 47. Closet Under First Story Stairs. In multiple-dwellings erected no closet of any kind shall be constructed under any staircase leading from the entrance story to the upper stories, but such space shall be left entirely open and kept clear and free from encumbrance.

Sec. 48. Cellar Entrance. In every multiple-dwelling hereafter erected there shall be an entrance to the cellar or other lowest story from the outside of the said building.

Sec. 49. Wooden Multiple-dwellings. No wooden dwelling to be occupied by more than one family shall hereafter be erected exceeding two stories and attic in height.

Sec. 50. Fire Walls. In a multiple-dwelling hereafter erected where such multiple-dwelling is completely divided into two or more parts by continuous fire walls and where such fire walls extend from the ground to a distance of two feet at all points above the roof of the building, and without any opening therein, each such part may be considered as a separate dwelling for the purposes of fire protection. Wooden dwellings shall not be built contiguous to each other, and no such dwelling shall hereafter approach nearer to another building than provided in section .. of this ordinance. In non-fire-proof multiple dwellings hereafter erected, each five thousand superficial feet in ground area covered by such multiple-dwelling shall be separated from the rest of such multiple-dwelling by fire-proof division walls. Such walls shall extend from the ground to a height of two feet above the roof. Standard fire-proof self-closing doors or fire-proof curtains may be installed in such fire-proof division walls.

Sec. 51. Outside Stand-pipes Not Required. Outside pipes shall not be required on buildings not exceeding three stories in height.

ARTICLE III.

ALTERATIONS.

In this article will be found the provisions which must be observed when a person proposes to alter an existing dwelling.

Sec. 52. Percentage of Lot Occupied. No dwelling shall hereafter be enlarged or its lot be diminished, or other building placed on its lot, so that a greater percentage of the lot shall be occupied by buildings or structures than provided in section — of this act.

Sec. 53. Yards. No dwelling shall hereafter be enlarged or its lot be diminished, or other building placed on the lot, so that the rear yard or side yard shall be less in size than the minimum sizes prescribed in Sections Twenty-one (21) and Twenty-two (22) of this Ordinance for dwellings hereafter erected.

Sec. 54. Height. No dwelling shall be increased in height so that the said dwelling shall exceed the height prescribed in section — of this act.

Sec. 55. New Courts in Existing Dwellings. An inner court hereafter constructed in a dwelling erected prior to the passage of this Ordinance, if extending through not more than two (2) stories shall be not less than eight (8) feet by eight (8) feet in size; if it extends through more than two (2) stories it shall be not less than ten (10) by ten (10) feet in size. Every such court shall have an air intake as required for new dwellings in section — and shall be open to the sky without skylight, or roof of any kind. Where it is not practicable to construct such passageway a metal duct not less in area than three hundred square inches nor less

in its least dimension than twelve inches may be used.

Sec. 56. Additional Rooms and Halls. Any additional room or hall that is hereafter constructed or created in a dwelling shall comply in all respects with the provisions for "Rooms and Halls" in new building contained in this Ordinance, except that it may be of the same height as the other rooms on the same story of the dwelling.

Sec. 57. Rooms and Halls, Lighting and Ventilation Of. No dwelling shall be so altered or its lot diminished that any room or public hall or stairs shall have its light or ventilation diminished in any way not approved by the health officer.

Sec. 58. Alcoves and Alcove Rooms Used for Sleeping Purposes or as Separate Rooms. No part of any room in a dwelling shall hereafter be enclosed or subdivided wholly or in part, by a curtain, portiere, fixed or movable partition or other contrivance or device, unless such part of the room so enclosed or subdivided shall contain a window as required by Sections ———————— ..... and .... of this Ordinance, and have a floor area as provided in Section ————————.

Sec. 59. Skylights. All new skylights hereafter placed in a multiple-dwelling shall be provided with ridge ventilators having a minimum opening of forty (40) square inches and also with either fixed or movable louvres or with movable sashes, and shall be of such size as may be determined to be practicable by the health officer.

Sec. 60. Water-Closet Accommodations. Every water-closet hereafter placed in a dwelling, except when provided to replace a defective or antiquated fixture in the same location, shall comply with the provisions of Sections .... and ..... of this Ordinance, relative to water-closets in dwellings hereafter erected, except that in the case of a new water-closet installed on the top floor of an existing dwelling, a ventilating skylight open to the sky may be used in lieu of the windows required by Section .....

Sec. 61. Fire-proof Dwellings. No dwelling shall hereafter be altered so as to exceed three stories in height unless it shall be a fire-proof dwelling.

Sec. 62. Fire-escapes. All fire-escapes hereafter constructed on any multiple-dwelling shall be located and constructed as prescribed in section — of this act.

Sec. 63. Roof Stairs. No stairs leading to the roof in any multiple-dwelling shall be removed or be replaced by a ladder.

Sec. 64. Bulkheads and Penthouses. Every bulkhead and penthouse hereafter constructed in a multiple-dwelling shall be constructed fire-proof or covered with metal on the outside.

Sec. 65. Stairways. No public hall or stairs in a multiple-dwelling shall be reduced in width so as to be less than the minimum width prescribed in sections — and — of this act.

Sec. 66. Dumb-waiters, Elevators and Shafts. All vertical shafts, dumb-waiters and elevators hereafter constructed in multiple dwellings shall comply in all respects with the provisions of section — of this act.

Sec. 67. Alteration of Existing Wooden Multiple-dwellings. Except as otherwise provided in this article, no existing wooden multiple-dwelling shall hereafter be enlarged, extended or raised unless the alterations thereto comply with the provisions of this act for the erection of new dwellings.

Sec. 68. Wooden Buildings on Same Lot with a Multiple-dwelling. No wooden building of any kind whatsoever shall hereafter be placed or built upon the same lot with a multiple-dwelling within the fire limits, and no existing wooden structure or other building on the same lot with a multiple-dwelling within the fire limits shall hereafter be enlarged, extended or raised.

ARTICLE IV.

MAINTENANCE.

Sec. 69. Public Halls, Lighting at Night. In every multiple-dwelling a proper light shall be kept burning by the owner in the public hallways near the stairs upon each floor every night from sunset to sunrise throughout the year if so required by the health officer.

Sec. 70. Water-Closets in Cellars. No water-closet shall be maintained in the cellar of any multiple-dwelling without a permit in writing from the health officer, who shall have the power to make rules and regulations governing the maintenance of such closet. Under no circumstances shall the general water-closet accommodations of any multiple-dwelling be permitted in the cellar or basement thereof; this provision, however, shall not be construed so as to prohibit a general toilet room containing several water-closets, provided such water-closets are supplementary to those required by this Ordinance.

Sec. 71. Water-Closet Accommodations. In every dwelling existing prior to the passage of this Ordinance there shall be provided at least one (1) water-closet for every apartment, group or suite of rooms, except that in multiple-dwellings of Class B there shall be provided at least one (1) water-closet for every fifteen (15) occupants or fraction thereof. No such water-closets shall be so located as to be accessible only through another room. This section shall be subject to the provisions of section 87 of this Ordinance.

Sec. 72. Basement and Cellar Rooms. No room in the cellar of any dwelling erected prior to the passage of this act shall be occupied either for living or for sleeping purposes. No room in the basement of any such dwelling shall be so occupied without a written permit from the commissioner of health. No such room shall hereafter be occupied unless all the following conditions are complied with:

(1) Such room shall be at least seven feet high in every part from the finished floor to the finished ceiling.

(2) The ceiling of such room shall be in every part at least three feet six inches above the surface of the street or ground outside of or adjoining the same.

(3) There shall be appurtenant to such room the use of a water-closet.

(4) The lowest floor shall be water-proof and damp-proof.

(5) Such room shall have sufficient light and ventilation, shall be well drained and dry, and shall be fit for human habitation.

Sec. 73. Cellar Walls and Ceilings. The cellar walls and cellar ceilings of every multiple-dwelling shall by the owner be thoroughly whitewashed or painted a light color and shall be so maintained by him when required by the health officer.

Sec. 74. Water-Closets and Sinks. In all dwellings the floor or other surface beneath and around water-closets and sinks shall be maintained in good order and repair.

Sec. 75. Repairs. Every dwelling and all the parts thereof shall be kept in good repair, and the roof shall be kept so as not to leak, and all rain water shall be so drained and conveyed therefrom as not to cause dampness in the walls or ceilings.

Sec. 76. Water Supply. Every dwelling where water supply is accessible or specified in the Ordinance shall have within the dwelling at least one (1) proper sink with running water furnished in sufficient quantity at one (1) or more places exclusive of the cellar. In two-family dwellings and multiple-dwellings of Class A there shall be a sink or wash bowl in each apartment, suite or group of rooms.

Sec. 77. Cisterns and Wells. Where there is no city water supply accessible, there shall be provided one or more adequate cisterns or wells with a pump. Such cisterns or wells shall be of such size and number and constructed and maintained in such manner as may be determined by the commissioner of health. The above requirements shall be subject to the provisions of section — of this Ordinance.

Sec. 78. Catch-basins. In the case of dwellings where, because of lack of city water supply or sewers, sinks with running water are not provided inside the dwellings, one or more catch basins properly connected with a cesspool for the disposal of waste water, as may be necessary in the opinion of the commissioner of health, constructed in such manner as he may specify, shall be provided in the yard or court, level with the surface thereof and at a point easy of access to the occupants of such dwelling and at a distance of not less than 100 feet from any well.

Sec. 79. Cleanliness of Dwellings. Every dwelling and every part thereof shall be kept clean and shall also be kept free from any accumulation of dirt, filth, rubbish, garbage or other matter in or on the same, or in the yards, courts, passages, areas or alleys connected with or belonging to the same. The owner of every dwelling, and in the case of a private dwelling the occupant thereof, shall thoroughly cleanse or cause to be cleansed all the rooms, passages, stairs, floors, windows, doors, walls, ceilings, privys, water-closets, cesspools, drains, halls, cellars, roofs and all other parts of the said dwelling, or part of the dwelling of which he is the owner, or in case of a private-dwelling the occupant, to the satisfaction of the health officer, and shall keep the said parts of the said dwelling in a cleanly condition at all times. This section shall not be construed to require the owner to keep clean the individual apartments of a two-family dwelling or a multiple-dwelling of Class A, except where such apartments are unoccupied. It shall be the duty of each occupant to keep the portion of the dwelling occupied by him and over which he has control in a cleanly condition at all times.

Sec. 80. Walls of Courts. In multiple-dwellings the walls of all courts, unless built of a light color brick or stone, shall be thoroughly whitewashed by the owner or shall be painted a light color by him, and shall be so maintained. Such whitewash or paint shall be renewed whenever necessary, as may be required by the health officer. Courts which are equivalent in width to the height of the buildings shall not be required to be painted or whitewashed in light color unless so required by the health officer.

Sec. 81. Walls and Ceilings of Rooms. In all multiple-dwellings the health officer may require the walls and ceilings of every room that does not open directly on the street to be kalsomined white or painted with white paint when necessary to improve the lighting of such room and may require this to be renewed as often as may be necessary.

Sec. 82. Wall Paper. Whenever required by the commissioner of health, all old wall paper shall be removed and the walls and ceilings thoroughly cleaned before being redecorated.

Sec. 83. Receptacles for Ashes, Rubbish and Garbage. Suitable tight metal cans, with covers, for holding ashes, rubbish, garbage, refuse and other

matter shall be provided and maintained for every dwelling. In the case of private dwellings and two family dwellings such cans shall be provided by the occupant. In the case of multiple dwellings of Class A where there are janitors, each family shall provide its own cans, but the owner shall provide such general cans to receive such waste materials as may be necessary. Wherever the owner of a multiple dwelling of Class A provides individual cans, for each apartment, it shall be the duty of the occupant of such apartment to keep the cans used by him in a cleanly condition at all times. Garbage chutes and bins are prohibited, but this shall not be construed as prohibiting garbage incinerators, inside of chimneys, if properly constructed.

Sec. 84. Prohibited Uses. No horse, cow, calf, swine, sheep, goats or chickens shall be kept in any dwelling or part thereof. Nor shall any such animal be kept on the same lot or premises with a dwelling except under such conditions as may be prescribed by the health officer. No such animal, except a horse, shall under any circumstances be kept on the same lot or premises with a multiple dwelling. This provision does not apply to dogs or cats unless such are kept for commercial purposes. No dwelling or the lot or premises thereof shall be used for the storage or handling of rags, junk, or any other material or substance subject to decay, which may be dangerous because of its odor, or because of the possibilities of harboring rats and other disease breeding or disease carrying animals.

Sec. 85. Illegal Use. The Bureau of Health may prohibit the occupancy of multiple buildings or may order buildings vacated when in the opinion of such Bureau of Health one or more of the occupants are proved to be of immoral character, or where it has been proven that they are used for purposes of prostitution or gambling, provided that prior to the issuing of the order compelling the vacation of such building or buildings the owner, his agent or representative has been notified of the existing conditions, and a maximum of 30 days has been granted to the owner, his agent or representative, during which to remove the offending occupant.

Conviction in a Court in the City of St. Paul on the grounds of disorderly conduct, prostitution, or gambling on the basis of evidence gathered on the premises, shall be sufficient reason for the issuance of an order for vacation, and it shall be the duty of the Police Department of the City of St. Paul to report to the Bureau of Health all of such cases of immoral conduct, prostitution or gambling found in any of the dwelling houses in the City of St. Paul, and upon which conviction has been secured in any court.

Sec. 86. Combustible Materials. No dwelling, nor any part thereof, nor of the lot upon which it is situated shall be used as a place of storage, keeping or handling of any article so that it is dangerous or detrimental to life or health; nor of any combustible article, except under such conditions as may be prescribed by the fire marshal under authority of a written permit issued by him. No multiple-dwelling nor any part thereof, nor of the lot upon which it is situated, shall be used as a place of storage, keeping or handling of feed, hay, straw, excelsior, cotton, paper stock, feathers or rags.

Sec. 87. Bakeries and Fat Boiling. No bakery and no place of business in which fat is boiled shall be maintained in any non-fire-proof multiple-dwelling of Class A hereafter erected, and no bakery and no place of business in which fat is boiled shall hereafter be installed in any non-fire-proof multiple-dwelling of Class A.

Sec. 88. Certain Dangerous Businesses. There shall be no transom, window or door opening into a public hall from any portion of a multiple-dwelling where paint, oil, drugs or spirituous liquors are stored or kept for the purpose of sale or otherwise. This provision shall not apply to hotels.

Sec. 89. Janitor or Housekeeper. In any multiple-dwelling in which the owner thereof does not reside, there shall be a janitor, housekeeper or other responsible person who shall have charge of the same, if the health officer shall so require.

Sec. 90. Overcrowding. If any room in a dwelling is overcrowded the health officer may order the number of persons sleeping or living in said room to be so reduced that there shall be not less than six hundred (600) cubic feet of air to each adult and four hundred (400) cubic feet of air to each child under twelve (12) years of age occupying such room.

Sec. 91. Lodgers Prohibited. The health officer may prohibit in any multiple-dwelling the letting of lodgings therein by any of the tenants occupying such multiple-dwelling, and may prescribe conditions under which lodgers or boarders may be taken in multiple-dwellings. It shall be the duty of the owner of all multiple-dwellings when notified by the health officer to see that the requirements of the health department in this regard are at all times complied with. The provisions of this section may be extended to private-dwellings and two-family dwellings, as may be found necessary by the health officer.

Sec. 92. Infected and Uninhabitable Dwellings to Be Vacated. Whenever it shall be certified by an inspector or officer of the Board of Health that a dwelling is infected with contagious disease or that it is unfit for human habitation, or dangerous

to life or health by reason of want of repair, or of defects in the drainage, plumbing, lighting, ventilation, or the construction of the same, or by reason of the existence on the premises of a nuisance likely to cause sickness among the occupants of said dwelling, or for any cause, the health officer may issue an order requiring all persons therein to vacate such house within not less than twenty-four (24) hours nor more than ten (10) days for the reasons to be mentioned in said order. In case such order is not complied with within the time specified, the health officer may cause said dwelling to be vacated. The health officer whenever he is satisfied that the danger from said dwelling has ceased to exist, or that it is fit for human habitation may revoke said order or may extend the time within which to comply with the same.

Sec. 93. Repairs to Buildings, Etc. Whenever any dwelling or any building structure, excavation, business pursuit, matter or thing, in or about a dwelling, or the lot on which it is situated, or the plumbing, sewerage, drainage, light or ventilation thereof, is in the opinion of the health officer in a condition or in effect dangerous or detrimental to life or health, the health officer may declare that the same to the extent he may specify is a public nuisance, and may order the same to be removed, abated, suspended, altered or otherwise improved or purified as the order shall specify. In addition to the above powers the health officer may also order or cause any dwelling or excavation, building, structure, sewer, plumbing pipe, passage, premises, ground, matter or thing, in or about a dwelling, or the lot on which it is situated, to be purified, cleansed, disinfected, removed, altered, repaired or improved. If any order of the health officer issued under the authority of the provisions of this Ordinance is not complied with, or so far complied with as he may regard as reasonable within fifteen (15) days after the service thereof, or within such shorter time as he may designate, then such order may be executed by said health officer through his officers, agents, employes or contractors.

Sec. 94. Fire-escapes. The owner of every multiple-dwelling on which there are fire-escapes shall keep them in good order and repair, and properly painted. No person shall at any time place any incumbrance of any kind before or upon any such fire-escape.

Sec. 95. Scuttles, Bulkheads, Ladders and Stairs. In all multiple-dwellings where there are scuttles or bulkheads, they and all stairs or ladders leading thereto shall be easily accessible to all occupants of the building and shall be kept free from incumbrance and ready for use at all times. No scuttle and no bulkhead door shall at any time be locked with a key, but either may be fastened on the inside by movable bolts or hooks.

ARTICLE V.

IMPROVEMENTS.

Sec. 96. Rooms, Lighting and Ventilation Of. No room in a dwelling erected prior to the passage of this Ordinance shall hereafter be occupied for living purposes unless it shall have a window of an area of not less than eight (8) square feet opening directly upon the street or upon a rear yard not less than ten (10) feet deep, or above the roof of an adjoining building, or upon a court or side yard of not less than twenty-five (25) square feet in area open to the sky without roof or skylight, unless such room is located on the top floor and is adequately lighted and ventilated by a skylight opening directly to the outer air.

Sec. 97. Public Halls and Stairs, Lighting and Ventilation Of. In all dwellings erected prior to the passage of this Ordinance the public halls and stairs shall be provided with as much light and ventilation to the outer air as may be deemed practicable by the health officer, who may order the cutting in of windows and skylights and such other improvements and alterations in said dwellings as in his judgment may be necessary and appropriate to accomplish this result. All new skylights hereafter placed in such dwellings shall be in accordance with Section — of this Ordinance and shall be of such size as may be determined to be practicable by the health officer.

Sec. 98. Sinks and Water-Closets. In all dwellings erected prior to the passage of this Ordinance the woodwork enclosing sinks and water-closets shall be removed and the space underneath said fixtures shall be left open. The floor and wall surfaces beneath and around such fixtures shall be put in good order and repair. Defective and unsanitary water-closet fixtures shall be replaced by proper fixtures, as defined by this Ordinance.

Sec. 99. Privy Vaults, School Sinks and Water-Closets. Whenever a connection with a sewer is possible, all privy vaults, school sinks, cesspools, crock hoppers or other similar receptacles used to receive fecal matter, urine or sewage, shall, with their contents, be completely removed and the place where they were located properly disinfected under the direction of the health officer within 60 days after notification of the Health Department. Such appliances shall be replaced by individual water-closets of durable non-absorbent material, properly sewer-connected, and with individual traps, and properly connected flush tanks providing an ample flush of water to thoroughly cleanse the bowl.

Each such water-closet shall be located inside the dwelling or other building in connection with which it is to be used, in a compartment completely separated from every other water-closet, and such compartment shall contain a window of not less than four (4) square feet in area opening directly to the street, or rear yard or on a side yard or court of the minimum sizes prescribed in Sections of this Ordinance. The floors of water-closet compartments shall be as provided in Section of this Ordinance. Such water-closets shall be provided in such numbers as required by this Ordinance. Such water-closets and all plumbing in connection therewith shall be sanitary in every respect and except as in this Ordinance otherwise provided, shall be in accordance with the local ordinances and regulations in relation to plumbing and drainage. Pan, plunger and long hopper closets will not be permitted. No water-closets shall be placed out of doors.

Sec. 100. Basements and Cellars. The floor of the cellar or lowest floor of every dwelling shall be whenever necessary concreted with not less than three inches of concrete, cement or side-walk tile of good quality and with a finished surface.

Sec. 101. Shafts and Courts. In every dwelling where there is a court or shaft of any kind, there shall be at the bottom of every such shaft and court a door giving sufficient access to such shaft or court to enable it to be properly cleaned out: Provided, That where there is already a window giving proper access it shall be deemed sufficient.

Sec. 102. Egress. Every multiple-dwelling exceeding one story in height shall have at least two independent ways of egress constructed and arranged as provided in section 39 of this ordinance. In the case of multiple-dwellings erected prior to the passage of this act where it is not practicable to comply in all respects with the provisions of that section, the inspector of buildings shall make such requirements as may be appropriate to secure proper means of egress from such multiple-dwellings for all the occupants thereof. No existing fire-escape shall be deemed a sufficient means of egress unless the following conditions are complied with:

(1). All parts of it shall be of iron or other incombustible material.

(2). The fire-escape shall consist of outside balconies which shall be properly connected with each other by adequate stairs or stationary ladders, with openings not less than twenty-four by twenty-eight inches.

(3). All fire-escapes shall have proper drop ladders or stairways from the lowest balcony of sufficient length to reach a safe landing place beneath.

(4). All fire-escapes not on the street shall have a safe and adequate means of egress from the yard or court to the street or alley on the adjoining premises.

(5). Prompt and ready access shall be had to all fire-escapes, which shall not be obstructed by bath-tubs, water-closets, sinks or other fixtures, or in any other way.

All fire-escapes that are already erected which do not conform to the requirements of this section may be altered by the owner to make them so conform in lieu of providing new fire-escapes, but no existing fire-escape shall be extended or have its location changed except with the written approval of the inspector of buildings. All fire-escapes hereafter erected on any multiple dwelling shall be located and constructed as prescribed in section 40 of this ordinance.

Sec. 103. Additional Means of Egress. Whenever any multiple-dwelling is not provided with sufficient means of egress in case of fire, the inspector of buildings shall order such additional means of egress as may be necessary.

Sec. 104. Roof Egress, Scuttles, Bulkheads, Ladders and Stairs. Whenever so required by the inspector of buildings every flat-roofed multiple-dwelling exceeding two stories in height erected prior to the passage of this ordinance shall have in the roof a bulkhead, or a scuttle which shall be not less than two feet by three feet in size. All such bulkheads and scuttles shall be fire-proof or covered on the outside with metal and shall be provided with stairs or stationary ladders leading thereto and easily accessible to all occupants of the building. No scuttle or bulkhead shall be located in a room, but shall be located in the ceiling of the public hall on the top floor, and access through the same to the roof shall be direct and unobstructed. When deemed necessary by the inspector of buildings scuttles shall be hinged so as to open readily. Every bulkhead in such multiple-dwelling shall have stairs with guide or hand-rail leading to the roof, and such stairs shall be kept free from incumbrance at all times. No scuttle and no bulkhead door shall at any time be locked with a key, but either may be fastened on the inside by movable bolts or hooks. All key-locks on scuttles and on bulkhead doors shall be removed.

REQUIREMENTS AND REMEDIES.

Sec. 105. Permit to Commence Building. Before the construction, extension or alteration of a dwelling, or the alteration or conversion of a building for use as a dwelling, is commenced, and before the construction or alteration of any building or structure on the same lot with a dwelling, the owner, or his agent or architect shall submit to the Building Inspector a detailed statement in writ-

ing, verified by the affidavit of the person making the same, of the specifications for such dwelling or building, upon blanks or forms to be furnished by the health officer, and also full and complete copies of the plans of such work. With such statement there shall be submitted a plat of the lot showing the dimensions of the same, the location of the proposed building and all other buildings on the lot. Such statement shall give in full the name and residence, by street and number, of the owner or owners of such dwelling or building and the purposes for which such dwelling or building will be used. If such construction, alteration, conversion or extension is proposed to be made by any other person than the owner of the land in fee, such statement shall contain the full name and residence, by street and number, not only of the owner of the land but of every person interested in such dwelling, either as owner, lessee or in any representative capacity. Said affidavit shall allege that said specifications and plans are true and contain a correct description of such dwelling, building, structure, lot and proposed work. The statements and affidavits herein provided for may be made by the owner, or by the person who proposes to make the construction, alteration or conversion, or by his agent or architect. No person, however, shall be recognized as the agent of the owner, unless he shall file with the Building Inspector a written instrument signed by such owner designating him as such agent. Such specifications, plans and statements shall be filed with the Building Inspector and shall be deemed public records, but no such specifications, plans or statements shall be removed from the office of the Building Inspector. The Building Inspector shall cause all such plans and specifications to be examined. If such plans and specifications conform to the provisions of this Ordinance, they shall be approved by the Building Inspector and a written certificate to that effect shall be issued by him to the person submitting the same. The Building Inspector may, from time to time, approve changes in any plans and specifications previously approved by him, provided the plans and specifications when so changed shall be in conformity with this Ordinance. The construction, alteration or conversion of such dwelling, building or structure, or any part thereof, shall not be commenced until the filing of such specifications, plans and statements, and the approval thereof, as above provided. The construction, alteration or conversion of such dwelling, building or structure shall be in accordance with such approved specifications and plans. Any permit or approval which may be issued by the Building Inspector but under which no work has been done above the foundation walls within one year from the time of the issuance of such permit or approval shall expire by limitation. The Building Inspector shall have the power to revoke or cancel any permit or approval in case of any failure or neglect to comply with any of the provisions of this Ordinance, or in the case of any false statement or misrepresentation is made in any specifications, plans or statements, submitted or filed for such permit or approval.

Sec. 106. Certificate of Compliance. No building hereafter constructed as or altered into a dwelling shall be occupied in whole or in part for human habitation until the issuance of a certificate by the Building Inspector that said dwelling conforms in all respects to the requirements of this Ordinance, or in the case any false statement Such certificate shall be issued within (15) days after written application therefor if said dwelling at the date of such application shall be entitled thereto.

Sec. 107. Prohibited Occupation. If any building hereafter constructed as or altered into a dwelling be occupied in whole or in part for human habitation in violation of the last section, said premises shall be deemed unfit for human habitation and the **health officer** may cause them to be vacated accordingly.

Sec. 108. Tenant's Responsibility. If the occupant of a dwelling shall fail to comply with the provisions of this ordinance after due and proper notice from the Commissioner of Health, such failure to comply shall be deemed sufficient cause for the summary eviction of such tenant by the owner and the cancellation of his lease.

Sec. 109. Registry of Owner's Name. Every owner, agent, or other person having control of a multiple dwelling shall file with the Bureau of Health and the Building Inspector a notice containing his name and address and also a description of the property, by street number or otherwise as the case may be, in such manner as the health officer shall prescribe.

Sec. 110. Registry of Boarder or Roomer. When required by the health officer the owner, agent or lessee of a dwelling shall keep a registry of all boarders or roomers, boarding, living or rooming in any dwelling. Such registry shall be in such forms as may be prescribed by the health officer.

Sec. 111. Inspection of Dwellings. The health officer or his duly authorized assistants or subordinates shall cause a periodic inspection to be made of every two-family and multiple-dwelling at least once a year. Such inspection shall include thorough examination of all parts of such dwellings and the

premises connected therewith. The health officer is also hereby empowered to make similar inspections of all dwellings and the premises surrounding or adjacent thereto, as frequently as may be necessary and for this purpose shall have the right to enter in and upon all premises and dwellings at such time or times as he may see fit.

Sec. 112. Enforcement. 1. Enforcement of all provisions of this act regulating the constructions of new buildings, the enlargement, alterations, and repair of existing buildings shall be under the jurisdiction of the Commissioner of Parks, Playgrounds and Public Buildings.

An Inspector of Buildings shall pass on all plans for construction, enlargement, alterations and repair of buildings, and shall inspect all such structures from time to time during construction.

It shall be the duty of the Building Inspector to keep a record of all buildings constructed, enlarged, altered or repaired with accurate information as to the time of construction, materials used, extent and character of buildings and of the cost of construction.

2. All provisions relating to the maintenance of buildings provided for in this ordinance should be under the control of the Bureau of Health and shall be enforced by the exercise of the police powers vested in said department by the laws of the State of Minnesota, the City Charter, and the ordinances of the City of St. Paul.

VIOLATIONS AND PENALTIES—COURTS HAVING JURISDICTION.

Sec. 113. Proceedings at Law. Whenever the Building Inspector is satisfied that any building or structure, or any portion thereof, the erection, construction or alteration, or repair of which is regulated, permitted or forbidden by this Ordinance, is being erected, altered, extended or repaired, in violation of, or not in compliance with, any of the provisions or requirements of this Ordinance, or in violation of any detailed statement of specifications or plans submitted and approved thereunder, or of any certificate or permit issued thereunder, or that any provision or requirement of this Ordinance, or any order or direction made thereunder has not been complied with, or that plans and specifications have not been submitted or filed as required by this Ordinance, the Building Inspector may, in his discretion through the Corporation Counsel, institute any appropriate action or proceeding, at law or in equity, to restrain, correct, or remove such violation, or the execution of any work thereon, or to restrain or correct the erection or alteration of, or to require the removal of, or to prevent the occupation or use of, the building or structure erected, constructed or altered, in violation of, or not in compliance with, any of the provisions of this Ordinance; or with respect to which the requirements of this Ordinance or of any order or direction made pursuant to any provisions contained in this Ordinance, shall not have been complied with.

In any such action or proceeding the City of St. Paul by the Corporation Counsel may, at the request of the Building Inspector and on his affidavit setting forth the facts, apply to any court of record in said City, or to a judge or Justice thereof, for an order to enjoin and restraining all persons from doing, or causing or permitting to be done, any work in or upon such building or structure, or in or upon such part thereof as may be designated in said affidavit or from occupying or using said building or structure, or such portion thereof as may be designated in said affidavit for any purpose whatever, until the hearing and determination of said action and the entry of final judgment thereon.

The Court, or Judge, or Justice thereof, to whom such application is made, is hereby authorized forthwith to make any or all of the orders above specified, as may be required in such application, with or without notice, and to make such other or further orders or directions as may be necessary to render the same effectual.

No officer of said Building Department, acting in good faith, shall be liable for damages by reason of anything done in any such action or proceedings.

Sec. 114. Notice of Violation of Ordinance—Service of Papers. All notices of the violation of any of the provisions of this Ordinance and all notices directing anything to be done, required by this Ordinance, and all other notices that may be required or authorized to be issued thereunder, including notice that any building, structure, premises, or any part thereof, are deemed unsafe or dangerous, shall be issued by the Building Inspector. or the Bureau of Health as the case may be, and may be served by an officer or employe of the Building Department, or the Bureau of Health, or by any person authorized by the said Departments.

If the person or persons, or any of them, to whom said notice or order is addressed, should reside in the State of Minnesota and have no known place of business therein, the same may be served by delivering to, and leaving with, such person or persons, or either of them, a copy of said notice or order, or if said person or persons cannot be found within said State after diligent search, then by posting a copy of same in manner aforesaid and depositing a copy thereof in a post office in the City of St. Paul, enclosed in a sealed wrapper addressed to said person or persons at his or their last known place of residence, with the postage paid thereon; and said

posting and mailing a copy of said notice or order shall be equivalent to personal service of said notice or order.

Sec. 115. Penalty. Any person who shall violate any of the provisions of this ordinance relating to the construction, enlargement or alteration of buildings, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than One Hundred ($100.00) Dollars or by imprisonment for not to exceed ninety (90) days for each offense.

Sec. 116. Time of Compliance. All improvements specifically required in this ordinance upon dwellings erected prior to the date of its enactment shall be made within one year from said date, or at such earlier period as may be fixed by the Department of Health, or by the Building or Fire Department of the City of St. Paul.

Sec. 117. All regulations and ordinances inconsistent with the provisions contained in this ordinance are hereby repealed, beginning April 1st, 1918, when this ordinance shall go into effect.